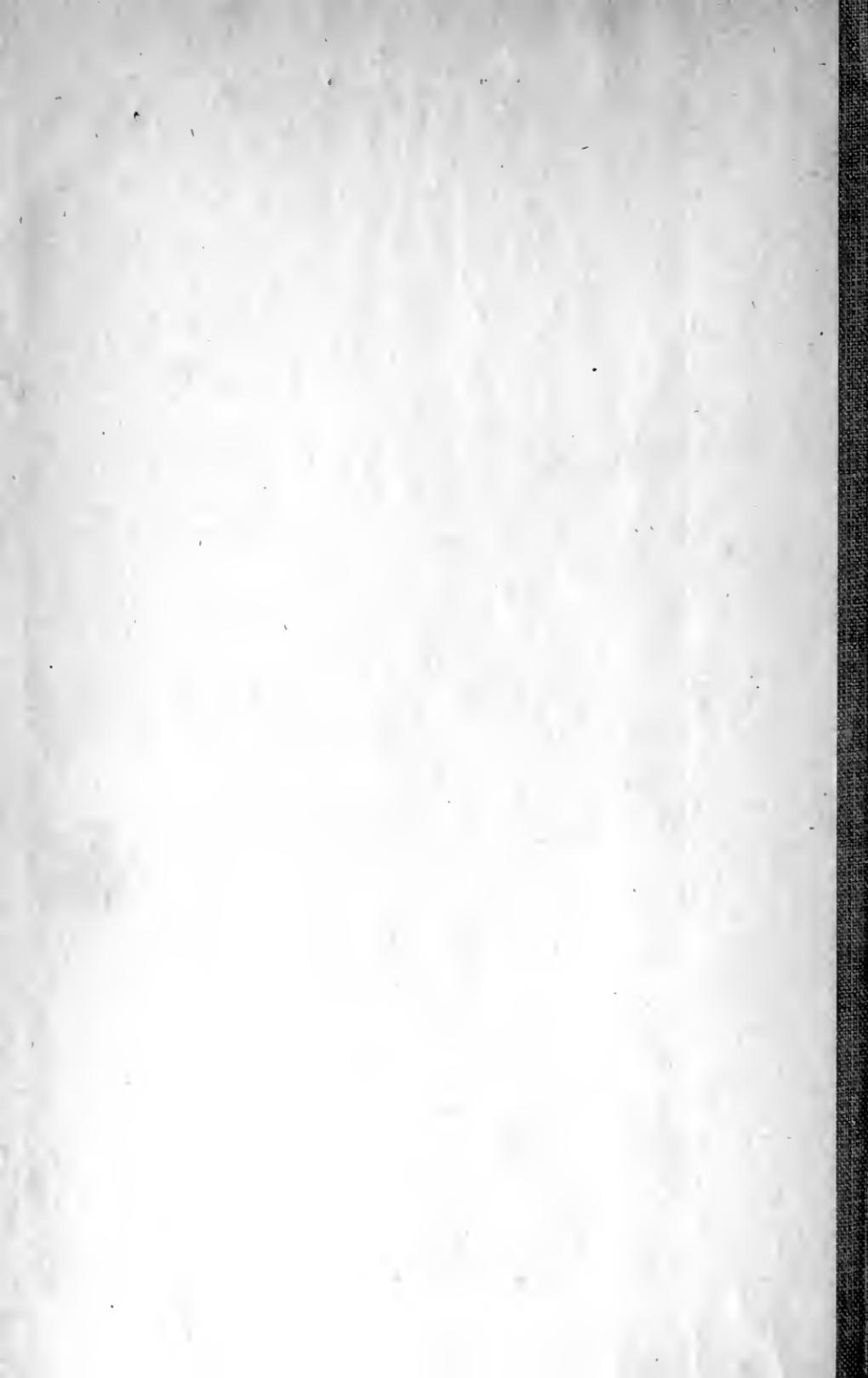


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# PROCEEDINGS

OF THE

## THIRTY-SIXTH ANNUAL CONVENTION

(*v*) OF THE

# ONTARIO EDUCATIONAL ASSOCIATION

HELD IN

## TORONTO

ON THE 20th, 21st AND 22nd APRIL, 1897.

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| 1896,       | - | JOHN DEARNES.                  |



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PROCEEDINGS  
OF THE  
*THIRTY-SIXTH ANNUAL CONVENTION*  
OF THE  
ONTARIO EDUCATIONAL ASSOCIATION.

---

*MINUTES OF THE GENERAL ASSOCIATION.*

FIRST DAY—EVENING SESSION.

*Tuesday, April 20, 1897.*

The Convention met in the Auditorium of the Education Department at eight o'clock this evening.

PRESIDENT DEARNESS in the chair.

On the platform were Honorable Dr. Ross, Minister of Education : Rev. Dr. Burwash ; Alderman Hallam : Rev. Dr. Dewart, and President Loudon of Toronto University.

The SECRETARY read a letter from His Worship, Mayor Fleming, regretting his inability to attend, and naming Alderman Hallam as his representative.

The PRESIDENT called upon Alderman Hallam, who, on behalf of the Mayor and Corporation, gave the members a hearty welcome to Toronto.

HON. G. W. ROSS, LL.D., Minister of Education, extended a hearty welcome to the Association. PRESIDENT DEARNESS replied on behalf of the Association.

ALDERMAN HALLAM invited the members of the Association to visit the Public Library and also the Conservatory at the Horticultural Gardens.

THE SECRETARY read a letter from the Secretary of the National Union of Teachers of Great Britain, and was instructed to cable fraternal greetings in reply.

The visitors and members then dispersed to the various rooms of the Education Department Buildings which have been recently completed and refurnished.

## SECOND DAY—EVENING SESSION.

*Wednesday, April 21st.*

REV. MR. BALLANTYNE opened the meeting by reading of Scripture and leading in prayer.

On motion of MR. S. MCALLISTER the Minutes of the last meeting, having been printed, were taken as read.

MR. W. J. HENDRY presented the Treasurer's report and moved its reference to the Auditing Committee. Seconded by Mr. Smith. Carried.

THE PRESIDENT nominated as Auditing Committee: Messrs. C. A. Barnes, Wilbur Grant and F. C. Powell.

THE PRESIDENT delivered the annual address.

DR. B. A. HINSDALE, of Ann Arbor, Mich., addressed the Convention.

The following gentlemen were elected officers of the Association:

MR. JOHN MUNRO, Ottawa, President.

MR. R. W. DOAN, Toronto, was re-elected as Secretary by acclamation.

MR. W. J. HENDRY, Toronto, was re-elected as Treasurer by acclamation.

The meeting closed at 10.30 p.m.

## THIRD DAY—EVENING SESSION.

*Thursday, April 22, 1897.*

The meeting opened at eight o'clock.

PRESIDENT DEARNESS in the Chair.

REV. MR. BALLANTYNE opened the meeting by reading of Scripture and leading in prayer.

THE PRESIDENT read a message from Dr. McKay, President of the Dominion Educational Association, inviting the members to the meeting of that Association in Halifax next year.

THE SECRETARY announced that a cable message had been sent to the National Teachers' Association now meeting at Swansea, Wales, and the following message had been received in reply:—

*SWANSEA, April 23, 1897.*

EDUCATIONAL ASSOCIATION, TORONTO

Thanks and good wishes. One flag, one profession, one heart.

NATIONAL UNION OF TEACHERS.

MR. J. H. BURRITT, of Pembroke, read the following resolution prepared by the Committee appointed to prepare an address to Her Majesty the Queen :—

That the Educational Association, representing all the Departments of Educational work under our system, desires to express its profound gratification that our Most Gracious Majesty, Queen Victoria, whose life has been devoted to the welfare and happiness of her subjects throughout her extended Dominions, has been spared to celebrate the completion of the sixtieth year of her reign. As an Association of Educational workers we recognize and feel that her noble, moral character, and her untiring and unceasing efforts to promote every worthy and charitable object, have furnished the best of object lessons tending towards the moulding of characters and directing the aims of our young people in the right form and direction, and if, in our efforts to secure the moral and intellectual well-being of our youth, we shall be able to fashion their lives according to the model furnished by her life, then we shall feel that we have accomplished a great and noble work. We hope and pray that her life may be spared for many years and that its close may be crowned with every possible blessing.

The resolution was adopted.

The audience joined in singing the National Anthem.

MR. J. COYLE BROWN moved, seconded by MR. JUSTICE BELL, that a copy of this address be engrossed and forwarded to Her Majesty. Carried.

It was moved by MR. J. A. BROWN and seconded by PROFESSOR HUME, that a committee consisting of the President, Mr. Martin of London, and the Secretary deal in such a way as they see fit in the matter of the jubilee of Mr. Wilson of London, who has finished his fiftieth year as a teacher—the first on record in the history of this Province. Carried.

THE PRESIDENT introduced Dr. Ross, who addressed the Convention on Citizenship and Higher Education.

MR. J. COYLE BROWN read the following notice of motion :—

I shall move at the next meeting of the Ontario Educational Association that a Committee be Associated with the Honorable the Minister of Education to consider the propriety of recommending a change of name in the case of *c, g, h, q, w, y, z, oo, an* and *aw, on* and *ow, oi* and *oy, ch, ck, gh, ph, gu, sh, tch, th*, and *wh*, so as to make the name of each correspond with its function, or main function, as the case may be.

THE SECRETARY stated that the Board of Directors had considered the motion of Mr. James L. Hughes having reference to manual training in schools, and they reported that the Constitution needs no alteration in order that the new department may be established. They also report the amended Constitution as printed and distributed among the members of the Association. On motion the report was adopted.

THE SECRETARY read the Auditors' Report and moved that it be received.

MR. S. McALLISTER seconded the motion. After a short discussion the report was adopted.

MR. F. F. MANLEY moved and MR. R. W. DOAN seconded, a vote of thanks to the representatives of the press for the able manner in which they had reported the proceedings, and to Hon. Dr. Ross, Minister of Education, for his liberality in financially assisting the Association, for his kindness in granting the Association the use of the Departmental Buildings for its meetings and for the interest shown by him in many other ways in the success of this meeting.

The motion was carried.

MR. J. COYLE BROWN proposed the thanks of the meeting to President Dearness who had well discharged the duties of his office.

MR. W. F. CHAPMAN seconded the motion, which was put to the meeting by Mr. Brown and carried amid applause.

The convention closed at 9.30 with the singing of the National Anthem.

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#### *MINUTES OF THE COLLEGE AND HIGH SCHOOL DEPARTMENT.*

TORONTO, APRIL 21, 1897.

The annual meeting of the Department was held as above in Mr. Scott's lecture room of the Toronto Normal School at 10 a.m.

THE PRESIDENT, Mr. Strang, took the chair.

On motion of DR. BURWASH, seconded by MR. MACMURCHY, the Minutes of the last meeting, having been printed, were taken as read and confirmed.

THE PRESIDENT, Mr. Strong, then read his address.

PROFESSOR SQUAIR read the following report of the Committee appointed last year on High School Entrance Examinations.

Your Committee beg to recommend :

(1) The division of the High Schools into two distinct classes, the one literary and classical, preparing for University and higher professional courses, the other English and scientific, preparing for agricultural and other industrial pursuits.

(2) The entrance to the first division should be such as to enable pupils to enter not later than twelve years of age, so that they may advantageously begin their language studies, while the entrance to the second division might be placed at a more advanced stage of the Public School programme and thus tend to raise the character of the Public Schools

(3) In the selection of examiners for entrance to the schools of the first division, representatives of High Schools of this class or of the Universities should have a controlling place, for entrance to those of the second division, representatives of the Public Schools and of the second division of the High Schools, should have prominence. All of which, etc., etc.

N. BURWASH,  
*Chairman.*

The discussion of the report was deferred till the conclusion of the reading of the next paper.

MR. WETHERELL, Principal of Strathroy Collegiate Institute, then read his paper on "The New Regulations," which, on motion, was discussed first. After considerable debate.

It was moved by MR. HENDERSON and seconded by MR. MACMURCHY that a Committee composed of Dr. Burwash, Messrs. Fletcher, Ellis, Merchant, Thompson, Steele, Strang, Wetherell, Burt, and the mover and seconder consider the matter and report at ten o'clock to-morrow. and that the same gentlemen form a Committee to bring before the Minister of Education, at their earliest convenience, any decision that may be arrived at by this Department after hearing the report of the said Committee. Carried.

The meeting then adjourned.

APRIL 22, 1897.

The Department resumed at 10 a.m., the President in the Chair, and about 120 members present.

The Secretary, MR. MANLEY, read the Minutes of yesterday's meeting, which were confirmed.

The following letters were read by the Secretary :

TORONTO, April 22, 1897.

MR. F. F. MANLEY, Secretary College and High School Department.

DEAR SIR,—I am instructed by the Modern Language Association to communicate to your Department the following resolution which was passed unanimously yesterday :

Resolved—That, inasmuch as the new regulations of the Education Department in regard to the Public School Leaving Examination and the Examination of the First Form, will have the probable effect of completely cutting off the study of French or German in Form I. and of greatly hampering the work in Form II., the Modern Language Association accord to the College and High School Department their co-operation in and endeavor to have the regulations so altered as to remove the difficulty. Yours truly.

W. H. FRASER,

*Secretary Modern Language Association.*

TORONTO, April 21, 1897.

The Secretary of the College and High School Department.

I am instructed to inform you of the following motion which was carried unanimously in the Classical Association at its last session :

Moved by MR. SMITH, seconded by MR. JOLLIFFE, that in the opinion of the Classical Association, the Examination for Form I. should not be extended beyond the five subjects heretofore required.

Will you kindly see that this reaches the Committee of your Department dealing with this question. Yours truly,

J. C. ROBERTSON,

*Secretary of Classical Association.*

Mr. Burt then read the following report of the Committee on "The New Regulations" :

Your Committee beg to recommend :

That the Public School Leaving Examination be divided into two parts, the First to consist of the subjects of the present Form I. Examination, and the second of the remainder of the subjects at present prescribed for the Public School Leaving Examination, candidates passing the first part being entitled to complete their Primary Examination, and those passing both to Public School Leaving certificates.

The adoption of this report was moved by MR. HENDERSON, seconded by MR. CRANWELLER.

In amendment it was moved by MR. MERCHANT, and seconded by MR. L. C. SMITH:

That no Departmental Examination for any grade of Teacher's Certificate be imposed upon Form I. of the High Schools and Collegiate Institutes of the Province, except in those subjects that are not required to be taught in the higher Forms for the purpose of completing the course for such certificates.

The amendment was carried almost unanimously and the report as amended was handed over to the Committee appointed to bring it before the Minister of Education.

It was then moved by MR. CHASE and seconded by MR. MANLEY:

That in view of the fact that the Senate of the University of Toronto, from time to time deals with matters that materially affect the High Schools of the Province, more especially in the prescribing of subjects for matriculation, be it resolved that the College and High School Department of the Ontario Teachers' Association, appoint a standing committee to make known to the Senate through the High School representatives, its wishes in the matters brought before it concerning the High Schools. Carried.

It was moved by MR. W. J. ROBERTSON, seconded by MR. G. E. SHAW, that the Executive of each of the six Associations in connection with this Department be requested to appoint three members to form this standing advisory Committee. Carried.

It was moved by MR. MERCHANT and seconded by MR. REID that the report on Entrance Examinations be left for consideration and discussion till the next meeting and that it be printed in the Minutes of this Department. Carried.

The election of officers was then proceeded with, and the following were unanimously elected :

*President* . . . . . Professor Maurice Hutton, M.A., Toronto.

*Vice-President* . . . . . R. A. Thompson, M.A., Hamilton.

*Secretary* . . . . . Fred. F. Manley, M.A., Toronto.

Professor Hutton then delivered his address on "Some Oxford Types."

As it was now almost the hour of adjournment, it was moved by MR. STEELE and seconded by MR. EMBREE, that Mr. Manley be requested to defer his address on "Physical Training" till the next meeting. Carried.

The meeting then adjourned.

The representatives from the six Associations on the Committee of this Department are :

*Classical*.....John Henderson, M.A., St. Catharines.

*Mathematical*....J. J. Brichard, M.A., Ph.D., Toronto.

*Modern Language*. W. H. Fraser, M.A., Toronto.

*Natural Science* ..E. L. Hill, B. A., Guelph.

*Historical* .....W. J. Robertson, M.A., LL.B., St. Catharines.

*Commercial*.....W. H. Fletcher, Kingston.

The representatives on the Board of Directors of the Ontario Educational Association are : Messrs. Hutton and Manley (ex-officio), Fraser, Hill, Robertson and Fletcher.

FRED. F. MANLEY,  
*Secretary College and High School Department.*

---

#### *MINUTES OF THE MODERN LANGUAGE ASSOCIATION.*

##### *Eleventh Meeting.*

TUESDAY APRIL 20, 1897.

A joint meeting of the Modern Language Association and the Classical Association was held at 10 o'clock a.m. Papers were read by Mr. A. Carruthers on "Some Phases of the Greek and the English Drama," and by Mr. F. H. Sykes on "The Arthurian Cycle."

Adjournment.

The Association reassembled at 2 o'clock p.m., when the President, MR. A. W. WRIGHT, delivered an address on "The Jew in English Literature."

On motion, Messrs. J. H. Cameron and O. J. Stevenson were appointed auditors.

A paper on "Eichendorff" was read by Miss H. S. Albarus, followed by a paper on "Phonetics in the High School," by Mr. A. W. Burt.

On motion of MR. J. H. CAMERON, seconded by MR. GEO. E. SHAW, it was resolved, "That teachers in High and Public Schools should receive training in Phonetics with a view to utilizing the results in the teaching of pronunciation and elocution."

Adjournment.

WEDNESDAY, APRIL 21, 1897.

The Association reassembled at 2 o'clock p.m., when a paper on "Model Examination Papers in French," was read by Mr. W. C. Ferguson.

On motion of MR. W. C. FERGUSON, seconded by MR. J. D. CHRISTIE it was resolved, "That a committee consisting of Messrs. Wright, Fraser, Shaw, Cameron, Jenkins, Ferguson and Christie be appointed to draw up limits to the course in French Grammar for Form II, and to report next year."

A paper was read by Miss Janet Carnochan on "The Women in Canadian Poetry."

Notice of motion was given by MR. W. H. FRASER, "That the Constitution be revised by changing the number of councillors from eight to twelve."

The following officers and councillors were elected for the year 1897-98 :—President, F. H. Sykes; Vice-President, J. H. Cameron; Secretary-Treasurer, W. H. Fraser; Councillors: A. W. Wright, J. Squair, Geo. A. Chase, W. C. Ferguson, E. S. Hogarth, Miss E. M. Balmer, Miss J. S. Hillock, Miss M. E. T. Addison.

A letter from Mr. A. Mueller relating to French and German in the lower forms of the High School was read.

On motion of MR. W. C. FERGUSON, seconded by MISS M. E. T. ADDISON, it was resolved, "That inasmuch as the new regulations of the Education Department in regard to the Public School Leaving and First Form examinations will have the probable effect of completely cutting off the study of French or German in Form I., and greatly hampering the work in Form II., the Modern Language Association accord to the College and High School Department their co-operation in an endeavor to have the regulations so altered as to remove this difficulty."

The Auditor's Report was received and adopted.

Adjournment.

THURSDAY, APRIL 22, 1897.

The Association reassembled at 2 o'clock p.m.

The Secretary, Mr. W. H. Fraser, was appointed to represent the Association on the Executive of the College and High School Department.

Messrs. Geo. A. Chase and Geo. E. Shaw, and Miss E. M. Balmer were elected by ballot to represent the Association on the Committee of the College and High School Department to advise the Senate representatives of the High School teachers as to revision of the University Curriculum.

A paper on "Waste Effort in Modern Language Teaching" was read by Mr. J. C. Rogers, followed by a paper on "King Arthur and

the Holy Grail" by Mr. A. H. Young, and a paper on "The Lyric Poetry of Keats" by Mr. R. S. Jenkins.

On motion it was agreed that the selection of papers to be recommended for printing in the Proceedings of the Ontario Educational Association be entrusted to a committee consisting of the President and Secretary.

Adjournment.

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#### *MINUTES OF THE NATURAL SCIENCE ASSOCIATION.*

TUESDAY, APRIL 20TH.

At 11.15 a.m., a joint meeting was held with Public School section for discussion of "Nature Study in the Public School." Mr. N. MacMurchy, B.A., of Elora read a paper on behalf of the Natural Science Association, and Mr. J. L. Hughes of Toronto, gave a paper on behalf of the Public School Department.

Owing to the lack of time, discussion was deferred.

At 2 p.m. the Association began its first session in Mr. McIntosh's Room, Model School.

The President, MR. W. H. JENKINS, B.A., of Owen Sound gave a fitting address in which he dealt with the present condition of science subjects in the curricula of the more advanced nations. He drew attention to the important place given to science subjects in the elementary courses in France, Germany and the United States.

MR. W. H. STEVENS, B.A., of Lindsay then gave a most practical address on "Simple Apparatus in Chemistry and Physics." He exhibited several small pieces of every inexpensive and yet effective apparatus.

PROF. W. G. MILLER, B.A., of the School of Mines, Kingston, read a good paper on "Mineralogy as a High School Subject."

Upon motion it was resolved to attend President Loudon's lecture on "Sound" before the Mathematical and Physical Association at 2 p.m. on Wednesday, in University College, and afterwards take up programme in Biological Building as arranged.

MR. F. W. MERCHANT, M.A., of London, explained that he was not prepared to go ahead with his paper on "Advances made in the Teaching of the Sciences during the past ten years," because he had thought it best for the Association to attend Dr. Loudon's lecture.

WEDNESDAY, APRIL 21ST.

The Association attended Dr. Loudon's lecture on "Sound," and very much appreciated the excellent manner in which the instructive experiments were brought forward.

After adjourning to the Biological Building, PRESIDENT JENKINS took the chair. Prof. Miller's paper was then discussed by MESSRS. Hill, Giffin, Knox, Cowley and others. There seemed to be a general feeling that something ought to be done to encourage the study of the minerals of our land. Upon motion of MESSRS. HILL and STEVENS, the officers were appointed a committee to draw the attention of the Minister of Education to the importance of Mineralogy as a subject of study.

The election of officers resulted as follows:—

*Honorary President*.....W. H. Pike, M.A., Ph.D., Toronto.

*President*.....J. R. Hamilton, B.A., Brantford.

*Vice-President*.....R. H. Cowley, M.A., Ottawa.

*Secretary-Treasurer* .....E. L. Hill, B.A., Guelph.

*Councillors*:—J. A. Giffin, B.A., St. Catharines; R. Lees, B.A., St. Thomas; G. A. Smith, B.A., Parkdale; W. H. Stevens, B.A., Lindsay; J. B. Turner, B.A., Hamilton.

*Representative to College and High School Department*....E. L. Hill, B.A.

PRESIDENT HAMILTON took the chair, and MR. E. C. JEFFREY, B.A., retiring Honorary President, gave an able address on "The Origin of Vascular Plants." Dr. Bensley assisted Mr. Jeffrey, throwing upon the screen a large number of photographs illustrative of the various points.

Upon motion of MESSRS. MERCHANT and G. A. SMITH, a hearty vote of thanks was tendered Mr. Jeffrey for his original address.

MR. R. LEES, B.A., of St. Thomas, read an extensive paper on the "Present Course of Study and Methods of Examination in Botany and Zoology."

THURSDAY, APRIL 22ND.

Mr. Lees' paper was discussed by Messrs. Cowley, Spotton and others.

Upon motion of MESSRS. COWLEY and CURRIE, it was resolved to ask for publication of Mr. Lees' paper, and request the Executive Committee to make a place in next year's programme for discussion of the Science curriculum.

Moved by MR. HILL, seconded by MR. REVELL, that Professor Miller's paper be published. Carried.

Moved by MR. LEES, seconded by MR. TURNER, that President Jenkin's paper be published. Carried.

Mr. Cowley then gave a thoughtful paper on "Manual Training."

Moved by MR. HILL, seconded by Mr. COLE, that Mr. Cowley's paper be published. Carried.

Mr. Sydney Silcox, B.A., of Collingwood, read an original and highly commendable paper on "Solutions," giving the results of experiments made to demonstrate the oneness of a number of phenomena classified under different names.

Moved by MR. REVELL, seconded by MR. COLE, that the paper of Mr. Silcox be printed. Carried.

In response to request of College and High School section for appointment of three representatives to act on committee to advise the Senate regarding the curriculum, the President, and Messrs. Jenkins and Turner were appointed.

Mr. D. G. REVELL, B.A., of Paris, brought up the question of a Biological Survey. Mr. Revell consented to bring the matter up next year.

Mr. R. H. Knox, B.A., of Iroquois, read a paper on "How the High School can help the Farmer," outlining the plans adopted at Iroquois High School.

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#### *MINUTES OF THE CLASSICAL ASSOCIATION.*

TUESDAY, APRIL 20th.

The morning session took the form of a joint meeting of the Classical and Modern Language Associations, presided over by Mr. A. W. Wright, President of the latter, and Mr. L. C. Smith, Vice-President of the former of these bodies.

Mr. A. Carruthers, of Toronto, read a paper entitled "Some Phases of the Greek and the English Drama," in which he dwelt upon the chief points of difference between these two dramas, both in form and in spirit.

Dr. F. H. Sykes, of London, in a paper on "The Arthurian Cycle," traced the genesis of the various poems and romances dealing with King Arthur and his knights.

At the afternoon session, the President, Mr. J. E. Wetherell, being in the Chair, Miss E. S. Fitzgerald was appointed press-reporter, after

which the President read his address, choosing for his subject "The Stars of Horace." This was followed by a paper on "Horace and Modern Poetry" by Mr. H. Bonis, of Vienna, and one on "The Pronunciation of 'EI.'" by Mr. A. A. MacDonald, of Toronto. [All these papers appear in this volume of proceedings].

After a discussion on the pronunciation of Greek and Latin and the reading of Latin verse, a paper was read by Rev. Prof. Huntingford, of Trinity University, on "The Theology of the Romans," in which he showed, by a review of the gods and goddesses of the Roman, how eminently practical and simple the typical Roman must have been.

#### WEDNESDAY, APRIL 21st.

The Association, meeting at 2 p.m., appointed the following officers for 1897-98:

*President* . . . . . Mr. L. C. Smith, B.A., Oshawa.

*Vice-President* . . . . . Mr. O. J. Jolliffe, B.A., Ottawa.

*Secretary-Treasurer* . . . Mr. J. C. Robertson, B.A., Toronto.

Councillors: Miss E. S. Fitzgerald, B.A., A. J. Bell, M.A., Ph.D., A. Carruthers, M.A., W. M. Logan, M.A., J. Henderson, M.A., W. S. Milner, M.A., S. F. Passmore, B.A., C. A. Mayberry, B.A.

The paper of Mr. W. Dale, of St. Mary's, on "The Political Attitude of Horace" was read by the Secretary. [This paper is published in this volume.]

A discussion followed on "The New Regulations," in which general dissatisfaction with the proposed changes in the Form I. Examination was expressed. It was unanimously resolved: That in the opinion of the Classical Association the Examination for Form I. should not be extended beyond the five subjects heretofore required.

Mr. H. I. Strang, of Goderich, then gave an address on "Classics in Ontario During the Past Quarter of a Century." After giving an account of his own training in classics in school and college, he compared the past and the present under the three headings of text-books, examinations and teaching, and gave it as his opinion that on the whole there had been in each of these a marked advance. Similar reminiscences of early classical education in Ontario were contributed by Mr. O. J. Jolliffe, Mr. J. Henderson, and Mr. J. W. Connor, while Prof. Hutton, Provost Welch and Chancellor Burwash also described the manner of their early training. The chief criticism of the present system of classical training in Ontario was that the study of foreign languages is not begun early enough.

THURSDAY, APRIL 22nd.

The Association met at 2 p.m. Mr. J. Henderson, of St. Catharines, was appointed the Association's representative on the Committee of the College and High School Department.

Mr. R. Ross, of Pembroke, read a paper on "Horace on the Art of Poetry." [This paper is printed in this volume.]

Mr. H. J. Crawford, of Toronto, in a paper entitled "Versions and Di-versions" gave an account of the leading translations and adaptions of Horace. The degree of failure and success of the various translators of Horace was discussed with many quotations by way of illustration, and a very racy account followed of the adaptions and parodies of Horace, especially in Graves' "Hawarden Horace."

Rev. Professor H. J. Cody, of Toronto, closed the programme with an address styled "A Classical Ramble in Italy." In this an account was given of the present appearance of some of the places of classical interest in the neighborhood of Rome, especially Tivoli, the Sabine Hills and Ostia.

Messrs. H. I. Strang, W. M. Logan and W. J. Fenton were appointed members of an advisory committee in connection with the High School Representatives on the University of Toronto Senate.

The Association then adjourned.

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*MINUTES OF THE MATHEMATICAL AND PHYSICAL  
ASSOCIATION.*

TUESDAY, APRIL 20, 1897.

The Association met at 2 p.m., the President, F. F. MANLEY in the chair, I. J. Birchard, Secretary.

THE PRESIDENT read his address, dealing with various questions of Secondary Education. In particular he advocated a reduction in fees in the case of students of decidedly satisfactory character on the ground that their future usefulness to the state would repay the cost of their education. On the other hand students whose progress was slow and generally unsatisfactory should be charged for the extra trouble and expense incurred.

Notice was given by the PRESIDENT of a change in the programme. President Loudon's paper was deferred until the afternoon of the following day.

Prof. M. A. McKenzie read a paper on "Elementary Geometry."

Mr. Jas. Davison read a paper on "Examination Papers" for 1896.

A discussion on Prof. McKenzie's paper followed in which Messrs. McDougall, Crassweller, Glashan, Baker and Gray took part.

Moved by MR. THOMPSON, seconded by MR. CRASSWELLER, that Messrs. McDougall, McKenzie, De Lury, Baker and Glashan be appointed a committee to report upon any desirable changes in the requirements in Geometry. Carried.

The Association then adjourned.

#### WEDNESDAY, APRIL 21ST.

The Association met in the Physical Laboratory of University College at 2 p.m., the President in the Chair.

PRESIDENT LOUDON delivered a lecture on "Interference in Sound," illustrated by the acoustical apparatus belonging to the University. The condensations and rarefactions existing in sound waves were rendered visible by means of Koenigs Manometric Flames and the laws of reflection from closed and open pipes were exhibited to the eye by tracings on smoked glass, projected on a screen.

The thanks of the Association were tendered President Loudon for his interesting and instructive lecture.

Prof. Baker read a report on several books relating to Greek Mathematics.

Mr. De Lury presented reports upon a number of Mathematical works.

The Association then adjourned.

#### THURSDAY, APRIL 22ND.

The Association met at 2 p.m., the President in the chair.

On behalf of the Committee on Geometry, Mr. McDougall reported progress and asked permission to sit again to complete their report and to send it to the Minister of Education.

Moved by I. J. BIRCHARD, seconded by W. J. ROBERTSON, that the Committee be instructed to complete their Report, print it, send a copy to each Mathematical Master in Ontario, with request for suggestions, and finally to consider the whole matter another year. The amendment was carried.

A paper on the "Logic of Arithmetic" was read by Mr. Taylor of Chatham.

The following are the officers elected for the following year :—

*Honorary President*.....Prof. M. A. McKenzie, M.A.

*President*.....W. H. Ballard, M.A.

*Vice-President* .....A. H. McDougall, M.A.

*Secretary-Treasurer*.....I. J. Birchard, Ph.D.

*Executive Committee* .....J. D. Dickson, M.A.; Wilson Taylor, M.A.; C. A. Chant, B.A.; W. M. Doxsee; W. Prendergrast, M.A.

*Representative on Executive of College and High School Department*.....I. J. Birchard, Ph.D.

The Association then adjourned.

I. J. BIRCHARD,

*Secretary.*

#### MINUTES OF THE HISTORICAL ASSOCIATION.

TUESDAY, APRIL 20, 1897.

The annual meeting of the Historical Association was opened at 2 p.m. by the President, William Houston, M.A., in an address dealing with history as a culture subject. Mr. Houston strongly advocated the study of original documents, even—though to a limited extent—by High School students.

Mr. Barlow Cumberland then gave an interesting description of some experiences of his own in teaching "History by Sight" by taking a class to visit historic places in the Niagara district.

A Round Table Discussion on "Aims and Methods of Teaching History" followed, after which the Association adjourned till the next day at 2 p.m.

WEDNESDAY, APRIL 21st.

The following officers were elected for the year 1897-98 :

*President*.....Prof. G. M. Wrong, Toronto University.

*Vice-President* ....Mr. Reavely, Thorold.

*Secretary-Treasurer*.Miss Nellie Spence, Toronto.

Councillors : Miss Janet Carnochan, Niagara ; Miss E. Jean Graham, Toronto ; Miss Scott, Toronto ; Mr. Clarke, Toronto ; Mr. Burgess, Owen Sound ; Prof. Ferguson, Queen's University, Kingston.

Representative on College and High School Section : Mr. Robertson, St. Catharines.

A paper on "Cabot and His Times" was read by Mrs. S. A. Curzon. This was followed by a paper on "Seignorial Tenure in Canada," by Mr. Benjamin Sulte, Ottawa, read, in Mr. Sulte's absence, by Mr. Houston.

*MINUTES OF THE COMMERCIAL ASSOCIATION.*

TORONTO, APRIL 20, 1897.

The members of this Association assembled in Mr. Murray's room of the Model School Building at 11.00 a.m.

At 11.20 the President took the chair, and after offering up prayers declared the meeting open for business.

The Minutes of the previous meeting were read and approved.

On motion of Miss McCUTCHEON, seconded by Mr. WISMER, Mr. Eldon was appointed Press Reporter for the sessions.

The President appointed Messrs. Wismer and Voaden, Auditors, with instructions to report the next day.

Communications were read as follows:—From Mr. Doan, General Secretary Ontario Educational Association, requesting to have the following matters attended to:—

1. Registration of Members.
2. Distribution of Reception Tickets.
3. To have Railway Standard Certificates handed to him by 12.00 noon Wednesday.
4. Appointment of Press Reporter.
5. To have MSS. to be published in Journal of Proceedings sent to him as early as possible.

From Mr. Srigley stating "That through illness and other causes, it was probable he would not be present at the meeting."

"Commercial Work and Drawing in our High Schools and Collegiate Institutes," furnished a subject for considerable discussion. Mr. Eldon introduced the subject and the following took a part in it:—Miss McCutcheon, Messrs. Wismer, Voaden, Grant, Thompson and MacMurchy.

Moved by MR. WISMER, seconded by Miss McCUTCHEON, that in the opinion of this Association, candidates for Bookkeeping at the First Form Examination be not allowed to bring into the Examination Hall *ruler paper*, nor that ruled paper be supplied them.

That a copy of this be forwarded to the Education Department with a request that if approved the presiding examiners be so instructed.

The motion prevailed.

Moved by MR. ELDON, seconded by MR. VOADEN, that this Association request the Minister of Education to change the name of

the "Public School Leaving Examination" in the regulations to read "High School First Form and Public School Leaving Examination."

The motion prevailed.

Miss McCutcheon introduced the question of models for drawing, stating that some change in the regulations for the expending of \$100 on models should be made. It was the general opinion that this sum was far too large.

Moved by Miss McCUTCHEON, seconded by Mr. ELDON, that Messrs. Fletcher, Wismer and Voaden be appointed a committee to draft a list of suitable objects and models to be used in teaching drawing.

The motion prevailed.

The morning session closed at 12.20.

The afternoon session began at 2.10 p.m.

Owing to the absence of the Vice-president Mr. Evans, it was found necessary to have a chairman, and Mr. Dickinson was selected.

An excellent paper on "Penmanship" was read by the President.

Remarks on the paper were made by Messrs. Dickinson, Newlands, Voaden, Milne, Wismer and Johnston.

The meeting accorded the President a hearty vote of thanks.

Mr. W. A. Douglas, B.A., read a very able paper on "The Study of Finance," illustrating and explaining by a series of diagrams. The paper was highly appreciated by the members, and Mr. Douglas received a hearty vote of thanks for the same.

This concluded the business for the first day and the meeting adjourned at 4.30 p.m.

#### WEDNESDAY, APRIL 21ST.

The second day's session of the Association was opened at 2.20 p.m., the President in the chair.

The Minutes of the previous meeting were read and approved.

The Auditors, Messrs. Wismer and Voaden reported, that the receipts and expenditures had been examined and were correct, that the balance on hand at end of last session was \$6.24.

The report was adopted.

Moved by Mr. WISMER, seconded by Mr. ELDON, that owing to the absence of Mr. Srigley and his paper not having been forwarded, it would be advisable to take up the business of to-morrow's session this afternoon and thereby bring the session to a close.

The motion prevailed,

A very able paper on "Practical Accountancy," was read by Mr. A. C. Neff, C.A. The paper offered many useful and practical suggestions to the members, who showed their appreciation in the vote of thanks to Mr. Neff that was passed.

Mr. A. C. Casselman then took up the subject of "Drawing," particularly dealing with the paper set for the First Form examination of 1896.

He explained the plan of marking as adopted by the examiners, and illustrated the drawings. On the conclusion of his remarks and after answering a number of questions, a vote of thanks was tendered Mr. Casselman.

Moved by MESSRS. WISMER and ELDON, that in the opinion of the Association it would be advisable to have the papers read here published in the Journal of Proceeding.

The motion prevailed.

Moved by Mr. DICKINSON, seconded by Mr. WISMER, that the following be the officers of this Association for the ensuing year:—

*President*.....Mr. R. H. Eldon, Toronto.

*Vice-President* .....Mr. A. Shultis, Brantford.

*Secretary-Treasurer*.....Mr. A. Voaden, St. Thomas.

*Councillors*.....Miss C. J. McCutcheon, Mr. J. A. Wismer, Mr. J. J. Davidson, Mr. Wilbur Grant, Mr. A. G. Henderson, Mr. W. Evans.

*Representative to the College and High School Association* ..Mr. W. H. Fletcher.

The motion prevailed, and the above named officers were declared elected.

A vote of thanks was passed and tendered to the retiring officers.

The Association then adjourned till the next annual meeting of the Ontario Educational Association.

WILBUR GRANT,  
*Secretary-Treasurer.*

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*MINUTES OF THE PUBLIC SCHOOL DEPARTMENT.*

TUESDAY, APRIL 20, 1897.

The Department was called to order at 10 a.m. in the gymnasium of the Normal School. The President, W. E. Groves, Toronto, in the Chair.

The meeting was opened by Rev. Mr. Morrison, Toronto, reading a portion of Scripture and leading in prayer.

The Minutes of the meetings of the Department in 1896, having been printed in the Minutes of the General Association, were accepted as read and were adopted.

Mr. Chas. G. Fraser, Toronto was appointed Minute Secretary and Messrs. W. H. Stewart, Bluevale, and M. Shurtliff, Portsmouth, Press Reporters.

The communications from the various Counties regarding the resolutions sent out by this Department had been summarized by the Secretary and a chart, showing the opinions on each resolution by each County was displayed on the wall.

The summary was read by the Secretary, accepted and referred to a committee consisting of one representative from each County Institute which had sent suggestions.

The committee consisted of Messrs. McAllister (convener), Milne King, Shurtliff, Snell, Beauregard, W. F. Brown, Batten, Rogers, Hall, Young, Campbell and Cloutier.

Mr. Geo. M. Ritchie, Treasurer, presented his report, which showed an expenditure of \$19.75 during the year and a balance on hand of \$26.60. It was received and referred to the auditors.

The Secretary, Mr. Harlon then presented his report suggesting (1) A change in the name of the Department to include Separate School Teachers. (2) That the Executive of this Department have three full, regular meetings in the year and (3) That the success of the sending of the resolutions to County Institutes warrants its continuation.

Miss E. J. Preston, of Ottawa, then read a paper on "The Criminal and his Recruiting Grounds."

The discussion on this paper took place in the afternoon and it was referred to the printing committee which recommended its insertion in the Minutes.

A joint meeting of the Natural Science Association with this Department was held at this time. Mr. W. H. Jenkins, B.A., Principal

Owen Sound Collegiate Institute, President of the Natural Science Association took the Chair.

Mr. N. MacMurchy, B.A., Elora, read a paper on "Nature Study in the Public Schools." He was followed by Mr. J. L. Hughes, Public School Inspector, Toronto, on the same subject.

The meeting then adjourned until 2 p.m.

#### TUESDAY AFTERNOON.

A joint meeting of the Public School Inspectors' Department, Public School Department, Training, and Kindergarten Departments, met at 2 p.m. with Mr. J. S. Deacon, Milton, Chairman of the Inspectors' Department, in the Chair.

Mr. D. Fotheringham, Public School Inspector, York County, read a paper on the subject of "Moral Training in the Public Schools."

Mrs. A. M. Hughes followed with a paper showing the great advantages of "Moral Training in the Kindergarten."

The subject of "The Effects of the High School Regulations on the Qualifications of Public School Teachers" was dealt with by Mr. H. I. Strang, M.A., Goderich, in a comprehensive manner.

Mr. John Spence, of the Toronto Public Schools, followed with a paper on the same subject concluding by presenting a number of resolutions.

The suggestions contained in these two papers were referred to a committee consisting of Messrs. Barnes, Mackintosh, McMillan and Strang to be reported on before the session closed.

The meeting adjourned at 4.30 p.m.

#### WEDNESDAY, APRIL 21ST.

PRESIDENT W. E. Groves called the meeting to order at 10 a.m. and Mr. Brown read a portion of Scripture and lead in prayer.

After reading to the members present the circular issued by this Department last June, the President gave an able address on "The Influence of the Public Department, How to Extend it."

The suggestions made in this address were referred to a committee consisting of Messrs. A. A. Jordan, D. Young and W. E. Groves and were by them recommended to be included with other resolutions and sent in form of circular to the Teachers throughout the Province.

A paper on "The Ethics of the School Room," by Mr. W. J. Mills, of North Bay, was next on the programme, but as he was absent a synopsis of the paper prepared by the writer was read by Mr. J. A. Hill, Ph.B., of Toronto.

The Minutes of Tuesday's meeting were then read and adopted.

MR. C. FERRIER, Principal Industrial School, Mimico, gave an excellent paper on "The Aims and Methods of an Industrial School."

It was moved by MR. PATTERSON, of Carleton Place, seconded by MR. W. J. HENDRY, Toronto, that a vote of thanks be tendered to Mr. Ferrier. Carried. On motion of MR. BATTEEN, Barrie, seconded by MR. W. E. SMITH, Toronto, it was carried that the paper be sent in pamphlet form to every teacher in the Province. On the suggestion of MR. GEO. M. RITCHIE, Toronto, this was decided to be done by having it inserted in the paper "Our Boys" published at the school by the boys, and mailed from there to the Teachers, the expense to be borne by this Department.

Messrs. W. Scott, Guelph, and A. H. Musgrove, Wingham, took up the subject of "The Public School Leaving Examination."

The many excellent suggestions made in these papers were submitted to the committee on resolutions and recommended to be sent to the Teachers of the Province with other resolutions.

The election of officers then took place and resulted as follows:

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|---------------------------------|--|
| <i>President</i> .....          | Mr. A. A. Jordan, Meaford.   |
| <i>Vice-President</i> .....     | Miss E. J. Preston, Ottawa.  |
| <i>Director</i> .....           | Mr. A. H. Musgrove, Wingham.   |
| <i>Secretary</i> .....          | Mr. Geo. M. Ritchie, Toronto.  |
| <i>Treasurer</i> .....          | Mr. J. W. Rogers, Toronto.   |
| <i>Executive Committee</i> .... | Mr. A. McMillan, Toronto ; Mr. W. Linton,<br>New Hamburg ; Mr. W. E. Groves,<br>Toronto. |
| <i>Auditors</i> .....           | Mr. S. Y. Taylor, Paris ; Mr. G. K. Powell,<br>Toronto.                                  |

The meeting then adjourned till 2 p.m.

#### WEDNESDAY AFTERNOON.

The Inspectors', Training School, Kindergarten and Public School Departments held a joint meeting. PRESIDENT W. E. GROVES in the Chair.

MR. S. T. LOCHEED, B.A., Caledonia, read a paper on "The Vocalization and Visibilization of the Phonic System."

Moved by MR. A. H. MUSGROVE, seconded by MR. A. A. JORDAN, that the time for each speaker in the discussion be limited to three minutes. Carried.

MR. J. COYLE BROWN, Public School Inspector, moved, and G. E. SMITH seconded, that the President and Secretary of each Department of the Association be unitedly a committee, together with Mr. S. T. Lockheed, to be associated with the Minister of Education in considering the propriety of recommending a change in the sound of certain consonants and digraphs used as single letters, so as to make them correspond with their chief function.

Messrs. Moore, of Dundas; C. W. Chadwick and H. Gray, Toronto; A. H. Musgrave, Wingham; Dr. Forrest, Lockheed, Johnston and Brown took part in the discussion but the motion was not carried.

Moved by MR. A. A. JORDAN, Meaford, seconded by MR. D. YOUNG, Guelph, that the thanks of this meeting be tendered to Mr. Lockheed for his excellent paper. Carried.

Mr. R. Murray then read an admirable paper on "The Ideal Teacher." Several of the members spoke approvingly of the description of "The Ideal Teacher," and the opportunities afforded Mr. Murray, as one of the Masters in the Model School, Toronto, of judging regarding the most desirable qualifications or qualities in a teacher.

It was moved by MR. DAVIS, seconded by MR. W. F. MACKENZIE, that the thanks of this meeting be tendered to Mr. Murray and that his paper be referred to the printing committee. Carried. The meeting adjourned at 4.30 p.m.

#### THURSDAY, APRIL 22ND.

Meeting was called to order at ten o'clock, Mr. Groves in the Chair. A portion of Scripture was read and all united in prayer.

Minutes of Wednesday's meeting were read and adopted.

MR. A. A. Jordan, Meaford, read a paper on "The Educational Council."

Messrs. Musgrove, Hall, Rogers, Gray and Linton took part in the discussion which followed. Mr. S. McAllister, Toronto, spoke on the subject and MR. D. C. HETHERINGTON, St. Catharines, moved a resolution seconded by MR. WM. LINTON, New Hamburg. See No. 1, additional resolutions.

Moved by MR. G. A. HALL, seconded by MR. D. YOUNG, Guelph, that Messrs. Jordan, Musgrove and Harper be a committee to consider the suggestions of Mr. Jordan and report. Carried. See clauses 5 and 6 of resolutions.

Mr. Jas. Mills, M.A., LL.D., Guelph Agricultural College, read a paper on "The Public School Course as a Preparation for the Duties and Responsibilities of Life in this Country."

Moved by MR. S. McALLISTER and seconded by MR. McMILLAN that the thanks of this meeting be tendered to Dr. Mills for his excellent paper and that it be printed in full in the Minutes. Carried.

Mr. R. H. Knowles, Hespeler, then took up the subject "Obstacles to Public School Education from Lack of Time and Overcrowding of Subjects."

Mr. Linton and Mr. W. Scott took part in the discussion of the paper.

On motion of MR. MARTIN, Toronto and MR. H. GRAY, the thanks of the Association were tendered to Mr. Knowles.

Meeting then adjourned.

#### THURSDAY AFTERNOON.

Meeting called to order at 2 p.m.

Mr. Groves in the Chair.

Moved by MR. H. GRAY and seconded by MR. J. E. BENNETT that while this section is in session alone, each speaker be limited to three minutes. Carried.

The Auditors' Report was then presented, and on motion of W. H. HARLTON, and J. BENNETT it was adopted. See Treasurer's Report.

The reports of the several committees on Resolutions were taken up, the result of which will be seen in the combined resolutions.

Moved by C. G. FRASER and seconded by MR. S. J. BOYD, that the Minute Secretary of this Association be instructed to address the Inspectors of the Province for a list of the teachers so that the paper containing Mr. Ferrier's paper may be sent direct to the teachers. Carried.

Moved by MR. F. GRAY and seconded by MR. A. A. JORDAN that \$2 be given to the Minute Secretary and each of the Press Reporters. Carried.

The sum of \$9.00 was granted to the Secretary, and the committee on Joint Resolutions instructed to wait on the Minister and publish report in the Minutes of the Association.

Moved by MR. JORDAN, seconded by MR. BROWN, that the Secretary arrange all the resolutions, have them printed and mailed forthwith to all Secretaries of County Associations. Carried.

Moved by MR. MOORE and seconded by MR. ROGERS that the retiring officers of this Department be tendered a vote of thanks. Carried.

Meeting then adjourned.

The following are the resolutions of the Public School Department. 1 to 20 and I. to IX. were sent out in pamphlet form to County Associations.

TORONTO, *May 1, 1897.*

At the recent meeting of the Association this Department passed or confirmed the following resolutions, and a motion was carried instructing the Secretary to arrange them in order and have them forwarded to the Secretaries of the various County Associations.

It is desired that they be brought to the notice of all the teachers at the meetings of the Teachers' Institutes, and that a report of the opinions thereon be sent to Geo. M. Ritchie, Secretary Public School Department, Ontario Educational Association. Address 297 Markham Street, Toronto.

1. That no certificate be granted to any person under 21 years of age.
2. That it is a matter of regret that the Minister intends to abolish after 1897 the granting of Non-professional Specialists' Certificates to any but those obtaining the degree of B.A.
3. That it be a request to the County Association to forward to the Minister of Education, to their representatives in the Legislature, and to the Secretary of this Department, copies of all such resolutions of a general character as may be passed at their meetings.
4. That, while the recent amendments to the Public Schools' Act, require teachers of Continuation Classes to hold First Class Certificates, this Department is pleased to have the assurance of the Minister that the interest of all teachers at present engaged in such work will properly safeguarded.
5. That this Department strongly disapproves of the composition of the Educational Council appointed in October, 1896, as unfair to the Public School Teachers, and not in accordance with assurances given to the members of this Department at its last meeting, that we would be given a fair representation on that Council.
6. That we would respectfully urge that in future, appointments under control of the Minister, the Public School Teachers receive that proportion of representation to which they are in justice entitled.
7. That Entrance Districts should coincide with Inspectorial Districts, with one Board of Examiners for each District.

8. That the Board of Examiners for the Entrance and Public School Leaving Examinations should consist of the Public School Inspector, a representative from the High School or Schools, appointed by the Minister of Education, and Public or Separate School Teachers, as the case may be, actually engaged as teachers in the Public or Separate Schools ; the appointment of these to rest with the Teachers' Associations.

9. That the Teachers' report of pupils' standing in the various branches for the term be considered by the Board of Examiners when necessary.

10. That Reading be not simultaneous with other subjects and that due precautions for secrecy be taken as to the matter to be read.

11. That Canadian History be continued for the Entrance Examination, with a brief outline of British History, as follows :

I. The Origin of the English Nation.

II. Feudalism.

III. Development of the Constitution (*a*) The Magna Charta, (*b*) The Institution of Parliament, (*c*) The struggle between the Kings and Parliament, (*d*) The Final Supremacy of the People.

IV. The Naval, Commercial and Colonial Supremacy of England.

V. The Development of the Literature.

12. That no literary selections be placed on the Public School Leaving Course that are not found in the Primary Course, and that pupils who have passed the Public School Leaving Examination be credited with having done the First Form work of the High School.

13. That "The Forsaken Merman" should be discontinued from the memorization selections for the Entrance Examination.

14. That Model School Certificates be interim for one year and renewable for two years upon passing a further Professional Examination. But that no renewal be granted by County Boards, after three years from the time of passing the County Model School Examination.

15. That no candidate be admitted to the Normal School who has not been trained at a County Model School, and who has not taught one year.

16. That graduates of the School of Pedagogy, who have not been trained at a Model or Normal School, should not be permitted to teach in the public schools.

17. That the standard for Entrance, Public School Leaving, Primary, and Junior Leaving Examinations should continue to be 33½ per cent. on each subject and 50 per cent. on the aggregate.

18. That the Non-professional qualification for Inspectors' certificates should remain as at present, but that an experience qualification of at least ten years be required, five of which shall have been spent in a public school, so as to cover the teaching of all the grades of public school work.

19. That the Ontario Government furnish each school with a copy of the School Act, and that the Dominion and Provincial Governments present to each school the Report of the Minister of Education, the Year Book, and any additional reports that may be deemed valuable for educational purposes, and that the Secretary be requested to communicate with the said Governments regarding the same.

20. That the present series of Public School Drawing Books should be withdrawn, and a new series prepared, consisting largely of blank pages, with a few well executed models for pupils to see not to copy; said series to be accompanied by a Teachers' Manual illustrating and explaining the work in detail.

The following additional resolutions bearing upon the papers presented were also passed :—

I. That this Association communicate by circular with the County Teachers' Association to urge upon them to appoint a committee to interview the local member of the Legislature to represent our claims for a fair representation on the Educational Council, using every effort to secure from him a promise of action at the next meeting of the Legislature.

II. That the basis of apportionment of Legislative Grants be dependent upon the following :—

- (a) A grant in regard to buildings and equipment.
- (b) A grant dependent on the amount of salary paid to Teachers.
- (c) A grant on the basis of average attendance.

III. That the following changes should be made with respect to the Public School Leaving Examinations :—

(a) The examination of the answer papers should be restored to the County Boards.

- (b) The examination fee should be reduced to One Dollar.

(c) The course in Geography should be reduced, leaving that subject to be continued in Form II, of the High School course.

(d) The course in History should be limited to fixed periods of the history (British).

IV. That the work in Entrance History be all of Canadian History and a period of British History—from the beginning of the Tudor period to the present time.

V. That the Training Term in the Model School be extended to one year.

VI. That a permanent Committee (the Executive Committee) be appointed from this Section to bring clearly before the Local Associations of the Province the importance of a good attendance of the Public School Teachers at this Association.

VII. That each Local Association be urged to send at least two duly accredited representatives, and we would further recommend that not both of these delegates be changed in each succeeding year.

VIII. That the Education Department be requested to place upon the mailing list the names of at least three Public School Teachers, other than Model School Masters, for each Local Association, provided that the names and addresses of these members be forwarded to the Education Department.

IX. That the incoming Executive Committee be requested to arrange a joint meeting of the Inspectors', Training and Public School Departments, as *A Committee on Resolutions*, such meeting to be not later than the second day of next Session.

Report of the Committee to whom were referred the papers dealing with the "Effects of the High School Regulations on the Qualifications of Public School Teachers."

The Committee recommended :—

1. That Grammar (English) and Arithmetic be obligatory subjects for the Junior Leaving Examination.

2. That the percentage required from candidates qualifying for teachers' non-professional certificates be higher than that required from candidates qualifying for the University or promotion examinations.

3. That the percentages for all the professional examinations be 40 and 60%.

4. That the regulation making two languages compulsory for Junior Leaving be rescinded.

5. That no Public School Teachers' certificates be granted a Normal School graduate unless he be a graduate of the Normal or Model School.

6. That holders of Normal School Second Class Certificates be permitted to write for First Class Certificates without attendance at a Normal College.

7. That Third Class Certificates should as soon as possible be limited to counties.

8. That the time required for the professional training of teachers be made longer.

In an interview with the Minister of Education concerning the foregoing resolutions the following was gathered:—

1. That we have Grammar all the way through in Literature and Composition, etc., and that any more Arithmetic is unnecessary except for Commercial work.
  2. That something might be done in the way of getting Teachers' Examinations on a different per cent. from those for matriculation, etc.
  3. That this might be done with little difficulty as it affects Training Schools only.
  4. That languages will remain. A deputation from the High School section expressed themselves as satisfied with this, provided the First Form Examination were divided.
  5. That a candidate qualified to teach High School subjects can teach elementary work.
  6. That the time might be extended for another year.
  7. That this would not be favorably considered.
  8. That this may be done when the new Normal School is built at London.
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#### *MINUTES OF KINDERGARTEN DEPARTMENT.*

TUESDAY, APRIL 20, 1897.

Meeting opened at 9.30, Miss Bolton, Ottawa, in the Chair.

After opening exercises, reading of Minutes and enrolment of new members, it was moved by MISS READMAN, seconded by MISS MCKIRDY, that an additional fee of ten cents be asked from members of this Department.. Carried.

Miss E. Millar was appointed Press Reporter.

Owing to Mr. Hughes' absence from the city after Tuesday, on motion of the PRESIDENT it was decided to alter the programme, so as to allow Mr. Hughes' address to be given on Tuesday in place of the Round Table discussion on Froebel's Gifts.

In the course of his talk Mr. Hughes said:—The first essential need of women for Kindergarten work was a broad culture and a special adaptation for the training of little children.

The soul should be developed and the child encouraged and guided.

Nature study was very necessary, not however, on the technical side only, but full of the spirit of nature, imparting a reverence for nature through love of life in flowers, etc.

A study of good literature and psychology was also necessary. The child should be studied mentally, morally and physically, with motherly love and sympathy. The Kindergarten being God's agent to guide the child to Him.

After a vote of thanks to Mr. Hughes the meeting adjourned at twelve to meet at two in the Public School Department, where Mrs. Hughes and Inspector Fotheringham spoke on Moral Training.

#### WEDNESDAY, APRIL 21ST.

Election of officers resulted as follows :—

*President* ..... Miss Currie, Toronto.

*Director* ..... " Loveck, Ottawa.

*Secretary* ..... " F. Bowditch, Hamilton.

One hour of games followed led by Miss Westman.

R. H. Cowley of Ottawa, then gave a paper "High School Training for Kindergarten Teachers," which was discussed. In connection a committee was appointed composed of Misses Loveck, Ottawa ; Duff, Toronto ; Laidlaw, London, and Warren of Peterboro, to confer with Mr. Cowley on the connection of Kindergarten and Primary Classes.

The Minister of Education then addressed the meeting, complimenting them on the work they were doing and wishing them every success in future.

Music, Art and Physical Culture he considered should be combined with a good practical education to make a good kindergartner.

After a vote of thanks to Mr. Cowley the meeting adjourned until 2 p.m., when the joint meeting was held.

#### THURSDAY, APRIL 22ND.

MRS. WYLIE, President of Buffalo Kindergarten Union, spoke on the benefit of joining the International Kindergarten Union.

The Report of Committees on connection of Kindergarten and Public School was then presented.

"Resolved that in the opinion of the Kindergarten Department of the Association it is advisable to formulate some definite plan of carrying on in the other grades the scientific training began in the Kindergarten ; and to this end we hereby appoint a committee consisting of Misses Laidlaw and Loveck to draught and submit to the Committee on Public School Studies a statement of the change, we believe it would be advisable to make in the Public School course of study at present prescribed."

The adoption of the report was moved by MISS LAIDLAW, seconded by MISS DAVIDSON. Carried.

Miss Readman gave an illustrated morning talk on "A Seed and its Development."

Miss Duff introduced Froebel's Gifts discussion, with a paper on "The First Gift." Miss Patterson followed with some original exercises with First Gift.

Miss Bolton gave a paper and synopsis of "The Syllabi on Gifts."

MISS DAVIDSON moved, seconded by MISS YELLOWLEES, a vote of thanks to Misses Duff, Readman and Patterson. Carried.

Miss Smith of Hamilton, gave an illustrated paper on "Drawing and Color Work," for which she received a hearty vote of thanks.

After discussion it was decided not to join the International Kindergarten Union.

Meeting then adjourned.

F. BOWDITCH,  
*Secretary.*

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#### MINUTES OF THE TRAINING DEPARTMENT.

TORONTO, APRIL 20, 1897.

The Training Department of the Ontario Educational Association met at 10.55 a.m., in Principal Kirkland's Room.

Mr. W. H. Elliott of Hamilton, the President of the Department, occupied the Chair.

The Minutes of last year were taken as printed.

Owing to the small attendance, it was moved by MR. SUDDABY, seconded by MR. CAMPBELL, that the meeting adjourn until to-morrow morning. Carried.

WEDNESDAY, APRIL 21, 1897.

The Department met at 9.00 a.m.

Mr. Wm. Scott of Toronto Normal School, as Convener of the Committee on "Educational Values of Subjects," reported. He gave an outline of the propositions of the committee, grouping the subjects as follows:

(a) English; (b) Mathematics; (c) Nature Studies; (d) Miscellaneous

The Report of the committee being incomplete, it was moved by MR. CAMPBELL, seconded by MR. WILKINSON, that the said committee be authorized to complete their work. Carried.

Moved by MR. BARBER, seconded by MR. BROWN, that this interim report be modified as soon as possible by the committee and report to the various members of the Training Department, the Inspectors, also to the various County Teachers' Associations. Carried.

Moved by MR. KIRKLAND, seconded by MR. SCOTT, that Prof. Hume's name be added to the committee, also that the committee have power to add to their numbers. Carried.

Mr. Suddaby of Berlin Model School, read a paper on "The Science of Education for County Model Schools."

Moved by MR. CONNOLLY, seconded by MR. J. J. TILLEY, that a hearty vote of thanks be tendered Mr. Suddaby for his excellent paper. Carried.

The election of officers for the ensuing year then took place resulting as follows:—

*President* ..... Mr. J. J. Tilley.

*Secretary* ..... " Wm. Wilson.

*Director* ..... " Wm. Scott, B.A.

Mr. J. R. Stuart of Stratford Model School, read a paper on "The Examination of Model School Students."

Moved by MR. SCOTT, seconded by MR. HALLETT, that Mr. Stuart's paper be printed in the Minutes of the Proceedings. Carried.

Discussion followed by Messrs. Scott, Barber, Brown, Campbell and Wilkinson.

On motion the meeting then adjourned.

THURSDAY, APRIL 22, 1897.

The Department met at 9.15 a.m.

The Minutes of the preceding session were read and confirmed.

Moved by MR. SCOTT, seconded by MR. BROWN, that Prof. Hinsdale be heard at 11 a.m. Carried.

Prof. Hume read a paper on the "Practical Value of Psychology to the Teacher."

Moved by MR. S. B. SINCLAIR, seconded by MR. BROWN, that the paper be printed in the Minutes of the Proceedings. Carried.

Dr. Tracy read a paper on "The Practical results of Child Study."

Moved by MR. WILKINSON, seconded by Mr. ALEXANDER, that the paper be printed in the Minutes of the Proceedings. Carried.

Prof. Hinsdale of Ann Arbor, Michigan, briefly addressed the teachers, taking as his subjects "The Feelings in Education."

The meeting adjourned at 12.15.

*PUBLIC SCHOOL INSPECTORS' DEPARTMENT.*

TUESDAY, APRIL, 20, 1897.

At 10 a.m., in the Library Room, Education Department, PRESIDENT Deacon opened the Department by calling on Inspector Brebner to lead in devotional exercises.

Minutes as printed were adopted.

A communication from Inspector J. C. Morgan was read stating he was ill but would make every effort to be present on the second day.

Mr. Robb reported that sickness in the family would prevent Inspector Tom's presence at this meeting.

On motion of MR. JOHN JOHNSON, seconded by MR. WILLIAM MACKINTOSH, the Secretary was requested to act as Press Reporter.

MR. H. D. JOHNSON moved, seconded by MR. MACKINTOSH, that Messrs. Michell, Robb and Prendergast be a committee on resolutions. Carried.

MR. FOTHERINGHAM referred to the new regulation regarding the prize or diploma offered by the Minister of Education for well kept school premises, and moved, seconded by DR. TILLEY, that a committee of three be named by the Chairman to consider and report on the subject. Carried.

The Chairman subsequently named Messrs. Fotheringham, Brebner and Summerby as the committee.

Mr. Hughes was then introduced and read a paper on "Manual Training." As Mr. Hughes left immediately after reading his paper, the subject was not discussed.

On motion of MR. SUMMERBY, seconded by MR. MICHELL, the subject of "Extension of Third Class Certificates" was next considered. Mr. Prendergast asked several questions as to the procedure of the different County Boards with regard to extension and renewal of Third Class Certificates.

Messrs. Michell, Mackintosh, H. D. Johnson, John Johnson, Brebner, Moses, Knight, Clendening and the President outlined the method followed in their respective inspectorates.

On motion the Department adjourned.

## AFTERNOON.

At 2 p.m. a joint meeting of Inspectors', Public School Teachers', Training and Kindergarten Departments was held in the gymnasium. Mr. J. S. Deacon, Public School Inspector, took the Chair.

Inspector Fotheringham was introduced and read a paper on "Moral Training in Public Schools." He was followed by Mrs. Ada Marean Hughes on the same subject.

Mr. H. I. Strang then read a paper on "The Effects of the High School Regulations on the Qualification of Public School Teachers." He was followed by Mr. John Spence on the same subject.

After discussion by Messrs. Knight, Mackintosh, McAllister, N. W. Campbell, Patterson and others, it was moved by MR. N. W. CAMPBELL, seconded by MR. Barnes, that a committee be named by the Chairman to consider and report on the subject of the last two papers. Carried.

The Chairman named Messrs. Barnes, Strang, Wilkinson, Mackintosh and McMillan as the committee.

Meeting then adjourned.

#### WEDNESDAY, APRIL 21ST.

The Inspectors' Department opened at 9 a.m. by Inspector Clendening leading in devotional exercises.

The Minutes of the first day were read and adopted.

Inspector John Johnson was then introduced and spoke on the subject, "A Detailed Account of the Inspection of one School."

Inspector A. Odell followed on the same subject. The subject was discussed by Messrs. H. D. Johnson, Fotheringham, Brebner, Dr. Kelly and Dr. Tilley.

Inspector Morgan then spoke on "What Method of School Inspection will Secure the Best Results?"

Inspector Fotheringham presented the following report of committee re Diploma for well kept School Premises.

Each diploma should have spaces for entering the percentages gained for five years and for the signature of the Inspector certifying such percentages.

When a Board has secured the required 80 per cent. for each of five years, let the Inspector so report to the Minister, and let there be a prize of say \$10.00 to be expended by them in further decorations.

For the proper recording of the standing of each school in this respect a simple form of report with stub should be provided.

(Signed) D. FOTHERINGHAM

*Chairman.*

Moved by MR. FOTHERINGHAM, seconded by MR. MACKINTOSH, that the report be received. Carried.

Moved by MR. DEARNESS, seconded by DR. TILLEY, that the report be considered to-morrow morning. Carried.

DR. F. TRACY, of Toronto University, then read a paper on "Child Study."

The election of officers was the next order of business taken up and the following officers were elected.

*Chairman* ..... Mr. W. F. Chapman, Toronto.

*Secretary* ..... Mr. H. D. Johnson, Strathroy.

*Director* ..... Mr. W. J. Carson, London.

At 2.15 a joint meeting of Inspectors', Public School Teachers', Training and Kindergarten Departments was held in the gymnasium. MR. W. E. GROVES, of the Public School Teachers' Department took the Chair, and immediately introduced MR. S. T. LOCHEED, B.A., who read a paper on "The Vocalization and Visibilization of the Phonic System."

The subject was discussed by Messrs. J. COYLE BROWN, Musgrove, Chadwick, Johnson, Gray, Dr. Forrest and others.

MR. J. COYLE BROWN moved, seconded by MR. W. E. SMITH:

"That the President and Secretary of this Association, and the Chairman and Secretary of each of the Departments, with the mover and seconder, be associated with the Minister of Education to consider the propriety of recommending a change in the names of certain consonants and digraphs used as single letters so as to make the name of each correspond with its function or chief function as the case may be." Lost.

On motion of MR. JORDAN, seconded by MR. YOUNG, a vote of thanks was tendered to Mr. Locheed, and the paper referred to the Executive Committee re printing of same.

MR. R. W. MURRAY then read a paper on "The Ideal Teacher."

Convention then adjourned.

#### THURSDAY, APRIL 22ND.

Opened at 9 a.m. by the President calling on Mr. J. Coyle Brown to lead in devotional exercises.

The Minutes of the second day were read and adopted.

The report re Diploma for well kept school premises was considered.

After discussion by Messrs. Fotheringham, H. D. Johnson, Knight, J. Coyle Brown, Mackintosh, Robb, Dearness, Michell and Dr. Tilley, MR. J. H. KNIGHT moved, seconded by MR. W. S. CLENDENING: That it is the opinion of the Public School Inspectors that the circular lately issued by the Education Department respecting School Houses and

Grounds is unsatisfactory, and that other means should be adopted to effect the necessary improvements; and that a committee be appointed by the Chairman to confer with the Minister of Education upon the subject. Carried.

The Chairman appointed the following committee: Messrs. D. Fotheringham, J. Dearness and J. Coyle Brown.

Dr. W. E. Tilley presented the following report of the committee on Forms:

We, your committee on Forms, beg to report that we met and considered the changes necessary in school Forms on account of recent changes in the Regulations. In addition to the changes before outlined we recommend that the attendance, which must now be reported annually, be entered in some simple way in the Annual Report.

We may add that we have interviewed the Deputy Minister on the matter of Forms, and that in all probability the suggested changes will be made in the next Forms prepared.

(Signed) W. E. TILLEY,  
WM. MACKINTOSH,  
W. J. SUMMERBY,  
J. DEARNESS.

On motion of DR. TILLEY the report was received.

Moved by MR. W. J. SUMMERBY, seconded by MR. F. L. MICHELL, that the committee on Forms be adopted and the committee requested to wait on the proper officials to carry the same into effect. Carried.

Mr. Clarke Moses then spoke on the subject "Promotion Registers."

After a discussion of the subject by Messrs. Barnes, H. D. Johnson, Mackintosh and J. Coyle Brown, MR. CLARKE MOSES moved, seconded by MR. MACKINTOSH: "That in the opinion of this Department of the Ontario Educational Association, it is desirable to have a General or Promotion Register, and that the Education Department be urged to provide one for the use of the Public Schools of Ontario." Carried.

Moved by MR. MOSES, seconded by MR. A. ODELL: "That the Chairman name a committee to prepare a suitable form for Promotion Register." Carried.

The Chairman named the committee on Forms, with Messrs. Moses and H. D. Johnson added.

The Chairman named Messrs. Clendening, Michell and the Secretary as a committee to report as to what papers read before this Department should be printed.

Dr. W. E. Tilley then opened a discussion on "Uniform Promotion Examinations." He was followed by Messrs. Barnes, Clendening and Dearness.

Mr. Brebner then read a paper on "Why Teachers Fail."

The Department adjourned from 11 to 12 to the Training Department to hear Dr. Hinsdale.

#### AFTERNOON.

The Department re-assembled at 2 p.m.

Mr. Robb read a paper on "Are our Readers Up to Date?"

Mr. H. D. Johnson then read a paper on "The Present Status of the Superannuation Fund." Mr. Dearness also spoke to the question.

Mr. Clendening presented the following report of the committee re "What papers should be printed in the Minutes."

The committee appointed to consider and report upon what papers from this Department should be published in the General Minutes, begs leave to report as follows:

1. That all the papers read or addresses delivered before this Department be published so far as the Secretary is furnished with copy for the same, viz. "Manual Training," "School Inspection," "Child Study," "Promotion Registers," "Uniform Promotion Examinations," "Why Teachers Fail," "School Readers," "Superannuation Fund."

2. That the paper upon "Moral Training" read before the joint meeting be also published.

All of which is respectfully submitted by your committee.

(Signed) W. S. CLENDENING,

F. L. MICHELL,

W. F. CHAPMAN.

On motion the report was received and adopted.

On further consideration of Mr. H. D. Johnson's paper, MR. DEARNESS moved, seconded by MR. J. C. BROWN: "That the subject be laid over for further consideration next year." Carried.

After Mr. J. Coyle Brown had been called to the Chair, MR. SUMMERBY moved, seconded by MR. MICHELL: "That a hearty vote of thanks be tendered our Chairman, Mr. J. S. Deacon, for the able, courteous, and dignified manner in which he has presided over our meetings." Carried.

After the Chairman had briefly replied to the vote of thanks the convention of 1897 was declared closed.

*MINUTES OF THE TRUSTEES' DEPARTMENT.*

*Visitor*—The Hon. G. W. Ross, LL.D., etc., Minister of Education, Ontario.

*DELEGATES.*

*Public School Boards*—*Aurora*, J. R. Rutherford, M.D.; *Barrie*, F. M. Montgomery; *Brantford*, J. A. Leitch; *Elmira*, R. Jackson; *Ottawa*, Geo. S. May and J. A. Parr; *Picton*, F. Terwilligar; *Port Hope*, James Evans; *St. Catharines*, Carl E. Klotz, L.D.S.; *Shelburne*, J. J. Rooney; *Toronto*, R. U. McPherson, J. Spence, M.D., E. P. Roden; S. W. Burns, J. C. Clarke, J. Noble, M.D.; *Woodstock*; Geo. J. Fraser.

*High School and Collegiate Institute Boards* — *Arthur*, J. Anderson; *Aurora*, J. R. Rutherford, M.D.; *Berlin*, A. Werner, (*Elmira*); *Bowmanville*, Col. F. Cubitt; *Brampton*, Rev. Wm. Walsh; *Chatham*, (Judge) A. Bell; *Cobourg*, Rev. J. Hay, B.D.; *Collingwood*, J. Hogg; *Dunnville*, J. Parry and S. W. Brown, L.D.S.; *Georgetown*, Chas. McKinley; *Grimsby*, Rev. J. Goodwin; *Meaford*, E. Y. Godfrey and F. Abbott; *Mitchell*, Dr. J. W. Cull; *Orangeville*, Rev. G. G. McRobbie, Sc.D., (*Shelburne*); *Seaforth*, D. D. Wilson; *Tilsonburg*, Rev. M. McGregor, M.A.; *Toronto*, Thos. A. Hastings.

*Boards of Education*—*Caledonia*, W. J. Burns, M.D.; *Guelph*, Jas. Watt and J. Cormack; *Hamilton*, J. J. Mason; *Kingston*, Geo. Y. Chown, B.A., and J. Galloway, Jr.; *Lindsay*, Col. Jas. Deacon and Thos. Stewart; *Newburgh*, Geo. Anson Aylesworth; *Oshawa*, L. K. Murton, B.A.; *Owen Sound*, R. McKnight and (Judge) J. Creasor; *Paris*, J. Allan and J. Penman; *Pembroke*, Jas. H. Burritt, B.A.; *Perth*, F. A. Hall; *Trenton*, Rev. W. T. Wilkins, B.A., and A. W. Hawley; *Uxbridge*, I. J. Gould; *Whitby*, J. E. Farewell, LL.B., Q.C. John Ball Dow, B.A., and Chas. F. McGillivray, M.B.

*Associate Member*—Rev. Walter Amos, *Aurora*.

*Honorary Member*—Rev. Alexander Jackson, M.A., Ph.D., *Cleveland, Ohio*.

WEDNESDAY, APRIL 21, 1897.

The Eleventh Annual Convention of the Public and High School Trustees of Ontario began in the Examiners' Room, Education Department, at 9.30 a.m.

After the registration of Delegates, the President, Jas. H. Burritt B.A., Pembroke, declared the Convention ready to begin business.

The Minutes of the Proceedings of this Department, 8th and 9th April, 1896, as printed in pamphlets, were taken as read, and upon motion were confirmed.

Messrs. Geo. S. May, Ottawa, and R. McKnight, Owen Sound, were appointed to report to the press the proceedings of this Department.

The Secretary-Treasurer reported as follows:—

At the meeting of the Directors of the Ontario Educational Association, held Thursday evening, April 9, 1896, it was again made manifest that there exists among some of the representatives of Departments a lamentable absence of understanding of the terms of union upon which the Trustees' Association federated with the Ontario Educational Association. Unfortunately there appears to have been preserved among the archives of the Ontario Educational Association, no official record of the terms agreed upon in November, 1892.

Mr. Dow's paper on "Rural Public Schools," etc., read before the joint meeting held April 8, 1896, is not printed at all in the volume of "Proceedings," Ontario Educational Association. And it achieved publication as an appendix to the pamphlet copies of the "Minutes" of the Trustees' Department, only after the Secretary of this Department had given in writing, his personal guarantee that the cost of such publication would be defrayed.

When in October, 1896, the printed copies of our Department's Minutes came to hand, they were found to lack the President's Address, and also Mr. Burritt's paper on "Parent and Trustee." At your Secretary's request, extra copies of these were printed, as a further appendix. In October, a circular was issued asking for suggestions of Topics for the programme of 1897.

Your President, Director and Secretary met in Toronto, November 27, 1896. There, and by letter afterward, the programme was prepared as well as the limited time at your committee's disposal permitted.

In March, 1897, over 2,500 copies of pamphlets and circulars pertaining to this Department, were distributed over Ontario, as in former years.

Having removed from the Province, late in March, Rev. Dr. Jackson, M.A., etc., the Director from this Department, sent in his formal resignation of that office; and desired that his regret at parting be conveyed to this Department.

The Ontario Ladies' College, Whitby, has made application for affiliation with this Department; and has named a representative to attend this Convention.

The bills and accounts of this Department are all settled to date, leaving a balance of \$26.60 in the Treasury.

(Signed),      GEO. ANSON AYLESWORTH,

*Secretary-Treasurer, Trustees' Department, O.E.A.*

TORONTO, April 19, 1897.

On motion the Report of the Secretary-Treasurer was received, and that portion of it which related to finance, was referred to the Auditors; and the remainder to a Committee composed of Messrs. Farewell, Hastings, Brown, and McRobbie.

Messrs. Geo. Y. Chown, B.A., Kingston, and Jas. Watt, Guelph, were appointed Auditors.

A circular from the Ontario Educational Association, Board of Directors, relating to the printing of Proceedings, was read.

The President called to the Chair the First Vice-President, Col. Jas. Deacon, Lindsay.

Mr. Jas. H. Burritt, B.A., Pembroke, read three papers in succession, entitled:—(1) “The System of Departmental Examinations;” (2) “The County Board of Examiners;” (3) “Religious Instruction in the Public School.”

The Hon. G. W. Ross, LL.D., etc., Minister of Education, entered the convention, and was invited to a seat beside the Chairman.

Mr. Burritt's address on “Religious Instruction in the Public School,” was discussed by Messrs. Wilkins, Chown, Rooney, Hastings, Walsh, Werner, McKnight, Amos, Mason, Cubitt, and Leitch. At twelve o'clock the meeting adjourned.

#### AFTERNOON.

At 2 o'clock p.m., the Convention was called to order by the President. Moved by J. J. MASON, Hamilton, seconded by S. W. BROWN, L.D.S., Dunnville, that without endorsing completely the arguments set forth by the President in his address on “Religious Instruction in the Public School,” we yet adopt his recommendation, namely, that the Minister of Education be memorialized to leave the law regarding Religious Instruction as it is. Carried.

“The Teaching of Latin in the Public School,” was the next topic taken up. The Secretary explained the absence of Mr. Meek, Kingston, whose name was coupled with this topic on the programme. Mr. A. Werner, Elmira, opened the discussion. The opinion of the Convention appeared to be that though it is desirable for pupils who are afterwards to take a course at the University, to begin the study of

Latin at an early age, yet it is not advisable at present to place Latin upon the Public School curriculum.

Moved by REV. MR. WILKINS, seconded by MR. HAWLEY, (both of Trenton), that we now discuss the question "How to obviate the difficulty that would arise by developing Fifth Form work in our Public Schools, without increasing expenditure there, with no corresponding diminution of work and cost in High Schools," coupled with the suggestion that "If the teachers of Public School and of High Schools could co-operate in the teaching of certain classes of pupils, more effectual work could be done without increased cost."

Mr. McKnight, Owen Sound, said that the Board which he represented established the Fifth Form in their Public School, but that it was a failure, and the Board had abolished it, the experiment having cost the town over \$500. Mr. Galloway, Kingston, said that because the Fifth Form work was taught in the Collegiate Institute, it had been discontinued in the Public Schools of his town; in his opinion its absence from the Public Schools was a hardship to the children of the poor. Rev. Mr. McGregor, M.A., Tilsonburg, feared that any attempt at co-operation in teaching the one class by both the High School and the Public School staff of teachers would prove impracticable. Col. Deacon, Lindsay, said that though there is but one law governing the matter, there appears to be a great variety of practice. He thought it would be better for everybody if the Public School Leaving Examination were made the test for entrance to High Schools. The discussion was continued by Mr. Warner, Elmira; Judge Bell, Chatham; Mr. Stewart, Lindsay; Judge Creasor, Owen Sound; Dr. Klotz, St. Catharines; Mr. Jackson, Elmira; Mr. Leitch, Brantford; and Mr. Hall, Perth, until the time for the next topic had arrived.

Mr. George Y. Chown, B.A., Kingston, read a paper on the topic, "Manual Training in the Public School."

Moved by REV. MR. WALSH, Brampton, seconded by MR. F. TERWILLIGAR, Picton, that Mr. Chown's paper be received with thanks, and that it be printed with the Proceedings. Carried.

Moved by J. ANDERSON, Arthur, seconded by R. MCKNIGHT, that while we congratulate the Rev. Alexander Jackson, M.A., Ph.D., upon his having received a call to Cleveland, Ohio, and while himself and his family have our best wishes in their new home, yet we cannot but express our regret at losing so active and valuable a member and ex-President of this Department, who assisted in many ways its growth, efficiency and success. And that the Rev. Dr. Jackson be made an

Honorary member of this Trustees' Department, Ontario Educational Association. Carried.

Mr. John Ball Dow, B.A., Whitby, introduced a series of resolutions embodying the recommendations of a paper on "Our Rural Public Schools," published in the Proceedings of this Trustees' Department, 1896, (page 15-19).

1. Moved by MR. DOW, seconded by COL. CUBITT, that this Department recommend that after the ensuing Departmental Examinations, the granting of Third Class certificates be discontinued.

It was argued that there are too many teachers now, so that they cheapen themselves. On the other hand, that if no more Third Class teachers could be procured, it would be a hardship for sparsely settled Townships, and poorer districts; that the literary qualifications of the Third Class teacher of to-day are higher than those of the First Class teacher of twenty-five years ago.

On division the motion was lost.

2. Moved by MR. DOW, seconded by COL. DEACON, that in the opinion of this Association of Trustees, (a) increased municipal aid to Rural Schools; (b) the formation of Township instead of Section Boards of Trustees; (c) and the levying of a uniform rate over the Township for the maintenance of schools, would tend to improve the status of such schools.

In amendment, moved by JOHN ANDERSON, seconded by F. TERWILLIGAR, that sections (b) and (c) be struck out, so that the motion read: "That in the opinion of this Association of Trustees increased municipal aid to Rural Schools would tend to improve the status of such schools."

After thorough discussion, the motion, as amended was carried, on a division of sixteen for the amendment, and fourteen for the original motion.

3. Moved by MR. DOW, seconded by JUDGE BELL, that this Association recommend the enlargement of School Sections, wherever practicable, so as to have graded schools; and the encouragement of permanency in the teaching profession. Carried unanimously.

The Convention adjourned for the day.

#### THURSDAY, APRIL 22ND.

At 9.30 a.m., the Convention reassembled, the President Mr. Burritt, in the Chair.

Pursuant to notice, MR. FAREWELL moved, seconded by MR. MCKNIGHT, that the Constitution of this Association of Trustees be

amended as follows,—That in Article 3, the words “One from each Township,” be struck out ; and in place thereof be inserted the words “One to represent the Rural Public Schools in each Provincial Electoral District.” And that in Article 4, the last sentence be amended so as to read, “The selection of the representatives of the Rural Public Schools in each Provincial Electoral District, shall be made by the County Municipal Councils representing the said Electoral Districts. Carried unanimously.

Moved by MR. MCKNIGHT, seconded by MR. MAY, that the Secretary notify the Clerks of the County Councils of Ontario of the substance of the foregoing amended Articles of the Constitution. Carried.

Moved by MR. J. J. ROONEY, Shelburne, seconded by the REV. MR. WALSH, Brampton, that the three papers composing the address of Mr. Jas. H. Burritt, President of this Trustees' Department, be received, and printed in the Minutes of the Proceedings of this Association. Carried.

The Auditors, Messrs. Geo. Y. Chown, B.A., Kingston, and Jas. Watt, Guelph, reported that they had examined the accounts and vouchers of the Treasurer of this Department for the year 1896-97, and had found the same correct.

On motion, the Auditors' Report was received and adopted.

The following were elected officers for 1897-98 :—

*President* . . . . . Col. Jas. Deacon, Lindsay.

*First Vice-President* . . . S. W. Brown, L.D.S., Dunnville.

*Second Vice-President* . . Geo. Y. Chown, B.A., Kingston.

*Secretary-Treasurer* . . . Geo. Anson Aylesworth, Newburgh,  
Addington County.

The following were elected members of the Executive Committee:—  
Messrs. Anderson, Arthur; Fraser, Woodstock; Klotz, St. Catharines;  
Leitch, Brantford; Mason, Hamilton; May, Ottawa; Stewart,  
Lindsay; Terwilligar, Picton; Werner, Elmira; Wilkins, Trenton.

In addition to the above-named officers and elected members, the Executive Committee includes, *ex-officio*, *ex-Presidents*, Farewell, Bell, Somerville, MacCraken, McRobbie, Lazier, Dow, Jackson and Burritt.

Moved by COL. CUBITT, seconded by MR. FAREWELL, that in the opinion of this Department of Trustees, it is absolutely necessary, in order that justice may be done to all the pupils in every Public School where the Fifth Form is taught, that there should be at least *two* teachers.

The motion led to a lively discussion, in which it appeared to be the

prevailing opinion of the Convention that although it is desirable, yet it is not essential to have two teachers wherever the Fifth Form is taught. The motion was lost.

Mr. C. F. MacGillivray, M.B., Whitby, read a paper on the topic "Too Many Examinations, Costing too Much in Fees." During the reading of which the Minister of Education entered the room. At the conclusion of the paper, after a few questions had been answered, the President stated that the Minister of Education would like to address the Convention at this time, as he would not be able to visit this Department again before its final adjournment. The following is in part what the Hon. Dr. Ross said :—"Examinations are regarded by educators as well nigh indispensable." In reply to the objection that we have too many, he pointed out that "A pupil could go through the Fifth Form, that is, through the whole Public School course without undergoing even one examination. A child may go from the Kindergarten to the University doors without passing any examination but one, the Entrance to the High School." He knew it was said that "The tendency of his surroundings constantly influenced the pupil to take many examinations;" but educators assume that pupils properly taught, will have no trouble in passing their examinations ; and if the examination tests are right, the examination promotes, and is part of the pupils' education.

There are 10,000 teachers in Ontario, doing their work *not* under the eyes of their employers ; examinations afford a test for the work of the teacher.

He would like to substitute the phrase "hard study" for "bad cram." All sensible and prudent men prepare specially for special emergencies.

He thought that it was a sound principle which required the pupil to pay part of the cost of the examination which is to benefit him.

In dealing with the amount of the fees he pointed out that it is always uncertain till after the fees are fixed, how many are going to try the examination. He stated that five dollars had been fixed as the maximum fee for any candidate in 1897, however many examinations he might try.

In conclusion the Hon. gentleman declared that the Trustees' Association had been helpful to him and to the Education Department ; he had always found them desirous to be helpful co-workers in providing for our boys and girls a good education. He should always treat them with the courtesy and respect due to such a body of educators.

At the conclusion of Dr. Ross' address the convention adjourned till the afternoon.

## AFTERNOON.

The Convention re-assembled at 2 p.m., Mr. Burritt presiding.

Moved by MR. J. J. MASON, seconded by COL. DEACON, that this Trustees' Department approve of the opinion expressed by the President, Mr. Burritt, in his address namely that the Board of Appeal (Departmental Examinations), should be entirely independent, and not in any respect composed either wholly or in part of the members of the Board of Examiners, and that we concur in the recommendation of Mr. Burritt with respect to appeal papers. Carried unanimously.

Moved by COL. DEACON and MR. JOHN ANDERSON, that the sum of forty dollars be paid to the Secretary as a fee for services rendered to this Department during the past year. Carried.

Moved by MR. MCKNIGHT and MR. TERWILLIGAR, that the consideration of Part II of our President's address, relating to the County Boards of Examiners, be deferred until the next convention of this Department. Carried.

Mr. E. Y. Godfrey, Chairman High School Board, Meaford, read a paper on "The Removal of Arithmetic and English Grammar from the Junior Leaving High School Curriculum."

Moved by MESSRS. MASON and ABBOTT, that Mr. Godfrey's paper be received and printed with the Proceedings. Carried.

Moved by MESSRS. ANDERSON and WATT, that the Executive Committee's nomination of Mr. J. E. Farewell, LL.B., Q.C., as this Department's member of the Board of Directors of the Ontario Educational Association for 1897-98, be approved and confirmed. Carried.

The Rev. Mr. M. McGregor, M.A., Tilsonburg, read a paper on "The Character of the Teacher as a Factor in Education."

Moved by MR. LEITCH, seconded by REV. MR. HAY, that the Rev. Mr. McGregor's paper be received with thanks and printed with the Proceedings. Carried.

Moved by MR. FAREWELL, seconded by REV. MR. HAY, that this Department is of the opinion that so much of Regulation No. 34 (relating to High Schools and Collegiate Institutes) as provides that \$50 be expended for models for drawing by High School Boards, and \$100 by Collegiate Boards—ought not to be enforced, except in the case of Industrial or Technical Schools—under the recent Act of the Ontario Legislature, and that this Department memorialize the Minister of Education to this effect.

The motion was discussed at considerable length. It was stated to be the intention of the Regulation that \$50 should be the maximum for drawing models for High Schools, \$100 the minimum for Collegiate

Institutes. The prevailing opinion was that the Regulation went too far, that its enforcement would only supply the Inspectors with another whip to hold over the School Boards, forcing them to expend more than was necessary, or to risk the withholding of the Legislative grants. The resolution was carried.

The Rev. W. T. Wilkins, B.A., Trenton, read a paper on the subject "Has not the time come when a Literary Qualification should be required of School Trustees, especially High School Trustees?"

Moved by MR. TERWILLIGAR, seconded by MR. AYLESWORTH, that the Rev. Mr. Wilkins' paper be received and printed with the Proceedings. Carried.

MR. JOHN A. LEITCH gave notice of motion that this Department memorialize the Minister of Education to have the law so changed that in future no Teacher under 21 years of age shall be entitled to receive a professional certificate.

Moved by MR. R. MCKNIGHT, seconded by MR. JOHN ANDERSON, that the thanks of this Trustee's Department are due and are hereby tendered to Mr. Jas. H. Burritt, for the able, impartial, and courteous manner in which he has discharged his duties as President. Carried

Mr. Burritt appropriately responded.

Moved by REV. MR. WILKINS, seconded by MR. FAREWELL, that this Department re-affirm the resolution passed at the convention of 1896, namely : That the Legislature be memorialized to make Clause 7, Section 31, of the High School Act, 1896, (relating to contiguous municipalities in another county,) compulsory instead of permissive. Carried

MR. FAREWELL, Chairman of the special committee to whom was referred the Report of the Secretary, moved, seconded by MR. WATT, Guelph, that the committee be allowed to report at the next meeting of this Department.

A number of delegates contrasted the present status of this Department with that of the Trustees' Association previous to its affiliation with the Ontario Educational Association. Dissatisfaction was expressed with the meagre press reports now allotted to this Department. Some would prefer that the Trustees should convene in November rather than in April, others thought that there was not time enough devoted to the discussion of the various topics. The opinion appeared to obtain that the five years of experience of union with the Ontario Educational Association had demonstrated that union-conferences were not advantageous to this Department; that the Trustees, numerically and otherwise, were being overshadowed by the

other Departments of the Ontario Educational Association ; that this Department is not homogeneous with the other Departments, of the Ontario Educational Association, inasmuch as all the other Departments, composed of the receivers of salaries, are acting for themselves, whereas this Department of unpaid Trustees, acts for the people at large. The motion prevailed.

After a vote of thanks had been tendered to the Secretary, and after Mr. Farewell had urged upon the delegates the expediency of fully reporting the convention in the public press of their various localities, the delegates and all present arose and very heartily united in singing "God Save the Queen."

The convention adjourned.

GEO. ANSON AYLESWORTH,  
*Secretary.*

TORONTO, *April 22, 1897.*

**FINANCIAL STATEMENT**

OF

**The Ontario Educational Association,****1896-97.****RECEIPTS :—**

|                                    |                   |
|------------------------------------|-------------------|
| Balance from last Statement.....   | \$248 75          |
| Members' Fees.....                 | 242 50            |
| Government Grant.....              | 600 00            |
| Sale of Proceedings.....           | 67 15             |
| Advertisements in Proceedings..... | 17 00             |
| Interest on Deposit.....           | 6 30              |
|                                    | <b>\$1,181 70</b> |

**EXPENDITURES :—**

|  |                   |
|--|-------------------|
| Publishing Proceedings.....                                  | \$706 41          |
| Mr. Kingsford's Expenses at Convention.....                  | 30 00             |
| Printing Circulars, Programmes, etc.....                     | 20 20             |
| Expenses of Convention.....                                  | 14 50             |
| Secretaries of Departments.....                              | 36 00             |
| Board of Directors, Railway Fare at Meeting in November..... | 56 60             |
| Postage, Mailing and Exchange.....                           | 22 71             |
| Reporting Evening Meetings.....                              | 22 50             |
| General Secretary, Allowance.....                            | 100 00            |
| Treasurer, Allowance.....                                    | 20 00             |
| Printing and Publishing J. B. Dow's Paper.....               | 13 75             |
| Balance .....  | 139 03            |
|  | <b>\$1,181 70</b> |

TORONTO, April 19, 1897.

ROBERT W. DOAN,  
*General Secretary.*

W. J. HENDRY,  
*Treasurer.*

We, the undersigned Auditors beg leave to report that we have examined the Books and Vouchers of the Treasurer and found them correct, with a balance on hand of \$139.03.

CHAS. A. BARNES, }  
F. C. POWELL, } *Auditors.*

# ADDRESSES AND PAPERS.

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## ONTARIO ASSOCIATION AND DOMINION ASSOCIATION.

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ADDRESSES DELIVERED AT THE OPENING OF THE CONVENTION.

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ALDERMAN HALLAM said:—

MR. CHAIRMAN, LADIES AND GENTLEMEN. I am afraid that I am ill-fitted to fill the duties that were intrusted to His Worship the Mayor, but on behalf of the Mayor and Corporation I have to extend to you a hearty welcome to the City of Toronto, and hope that this meeting will be satisfactory, and add to your interest in school work. I may say that the reason given by His Worship the Mayor is not the only one which is the cause of his absence to-night. His Worship the Mayor has been made the happy father of a nice little girl, and the Council in their gratitude for such a delightful event passed a resolution congratulating him, and asking that the daughter should be named Victoria, and His Worship went right away to convey that resolution and request to his wife. Now I don't know what the object of this meeting is exactly, but I am sure by the delightful audience I see—the pretty faces and nice dresses of the ladies and intelligent looks of the gentlemen—that there is something very important about it, and it affords the citizens of Toronto a delightful opportunity to meet with people from every part of the country interested in educational work. It is to you that the country looks for the proper education and direction of the youth of our country, and a great responsibility rests upon you in that direction. There are a great many people, of whom I am one, who are beginning to think that our common school system has cost them too much—that there is too much attempted and too little attained. I am not very well versed in that matter, but there are a great many people through Ontario coming to that conclusion. However, I am not going to discuss that question, so I shall simply repeat the hearty welcome on behalf of the Mayor and Corporation of the City of Toronto.

HON. G. W. ROSS, LL.D., said :—

MR. PRESIDENT, LADIES AND GENTLEMEN. After the very kindly welcome of Alderman Hallam on behalf of the City of Toronto I suppose you now feel very much more at home. He is the master of the feast. He controls the police and the general administration of the city, and he has no doubt in his remarks intended to guarantee you immunity from all harm and molestation during your sojourn in the city. I am glad that the City of Toronto thinks enough of the teachers of Ontario to send its Mayor or its representative to give you a welcome to the capital of the Province. It is no more than we have a right to expect from the city for which teachers have done so much—for without the educational force concentrated here, in Toronto, I would not give much for the city (hear, hear). It is a great city because it is a great centre of education, and if we took away all our High Schools from Toronto, and our Universities and Collegiate Institutes and all else that constitutes its glory as an educational centre I don't think it would have a Mayor—I don't think it would need a Mayor; you could scarcely find it; it would be a reminiscence.

Well, many of you have come to revisit it on account of its greatness and its educational influence; but you have come for other purposes, and it is my pleasant duty to welcome you because of this happy visit—which I hope is to be a happy visit—the annual visit on business connected with the educational work of the country. I welcome you particularly because this is the year of jubilees, and I suppose this meeting of the teachers will partake somewhat of the festivities appropriate to a jubilee year. This is, they tell us, the four hundredth anniversary of the discovery of Canada; and where would we be, or what would we be, had it not been for John Cabot and his adventurous mariners in finding for us a local habitation and a name? I don't know what would have become of the old world were it not for the new. We are here, I suppose, because John Cabot ventured abroad and found for us a home.

This year, too, is the hundredth anniversary of that parliament which first projected the University for the Province of Ontario, and a small parliament it was, meeting in very homely quarters in the little village of Newark across the Lake, represented only by sixteen important and influential men—as members of parliament always are—a parliament that has given us an example of liberality and forethought which we should not forget. We are glad to recognise

the work of that parliament even at this gathering of influential teachers, representing, I suppose, ten thousand members of the profession in different spheres of usefulness.

Then, this is the ninetieth anniversary of the establishment of High Schools in the Province of Ontario. In 1807, the parliament of Ontario projected four Grammar Schools ; one at Sandwich ; one at Newark ; one at Kingston ; one at Cornwall. The University was supposed to be sufficient for Toronto ; a Grammar School was not required there. From that small beginning, the work of higher education has gone bravely on until we have now 130 High Schools with over 500 teachers, attended last year by about 25,000 pupils. We have to thank the fathers of our High School system for the assistance they gave to our higher education years ago. Then, this is the eighty-first anniversary of our Common School system—a system first organized in the year 1816 by an Act of Parliament consisting, I think, of fewer than twenty sections with no Chief Superintendent or Minister of Education. What a dreary outlook it must have been ! No provision made for the training of teachers ; no regulations to be discussed or criticized—wondered at, or reorganized, or developed, or rejuvenated, or crucified, or condemned. What a paradise it must have been for the early teachers of eighty-one years ago ! But that is the way we started. We have progressed wonderfully in many respects. Teachers have multiplied exceedingly on the face of the earth since those days. The attendance in Ontario, for its population then was only thirty or forty thousand, must have been exceedingly small: now the school attendance numbers about half a million. It is well for us to remember the day of small things, and from what our school system has grown.

Then, in the line of anniversaries, not less noble in some respects though not educational, we have the sixtieth anniversary of the Coronation of Her Gracious Majesty Queen Victoria—an anniversary which every true Canadian will celebrate probably in feast and song, but, at all events, in some appropriate way, in a way worthy of a queen so noble and a reign so meritorious. I have suggested through the inspectors that that day should be celebrated in every public school in Ontario, by special exercises on the Friday afternoon preceding the 22nd of June which is the official day for the celebration, and that every teacher should make an effort to place in every school-room in the Province of Ontario a portrait of Her Majesty as a memorial of her reign, for future generations to regard with the same feelings of respect, I trust, as we

regard it ; and I hope that will be carried out, for it is well in connection with these things that those who are to be the future citizens of this country should gather from a reign so useful and so satisfactory to the British Empire such lessons as it will naturally convey.

Then this is the fiftieth anniversary of our provincial Normal Schools. On November 1, 1847, in the old Government House somewhere down town, was first opened a Normal School in the Province of Ontario, under the principalship of Mr. Robertson, who was brought specially to this country for that purpose. That was the day of small things too. In the following year, I think, the Model School was opened ; the stables of the Government House were fitted up for Model School classes. Fifty years have passed away and, in the interval, this building has been erected and commodious quarters have been found for our Model School teachers. More than that, in Eastern Ontario another Normal School equal in efficiency and built for the eastern section of the Province has been added to the list, and before the century closes we hope in Western Ontario too, in London, there will be a Normal School equal in efficiency to the two others. We have grown in that respect. That anniversary is one worthy of commemoration.

So we have a great many things to congratulate ourselves upon—a great many educational events to which the mind can naturally revert ; a great many mile-stones by which our progress may be indicated. And, although it may be proper and reasonable that we should criticize our growth and measure ourselves even by a higher standard than that to which we have yet attained, I think at the same time it is but reasonable and proper that we should congratulate ourselves on the progress we have made. The untrained teacher in these long years has given place to the trained teacher. The log school-house has been superseded by comfortable and convenient school-rooms throughout the whole extent of this country. The Grammar School of the past with its single principal—and he not in many respects a man of the highest culture, although we had good men in those days—has given place to the palatial High School of to-day with staffs of from two to seventeen and eighteen, and rivals in some respects in their efficiency and equipment of the Universities of other countries. For all these things we have reason to be devoutly thankful. Our University which was started under such unfavorable circumstances—started by the heroic forethought, I must say, of the fathers of Upper Canada—has now within its halls over one thousand students. Under-graduates in Arts number 957 ; under-graduates in

Medicine this year 293, with 100 in attendance from the School of Science. These are indications of educational development and educational growth.

Our friend, the representative of the Mayor, has said that he thinks perhaps our common schools cost too much. Well, I don't think so. (Hear, hear, and applause). Naturally, I have in the course of my career to differ from a great many people upon a great many things, and that is one thing upon which I differ from all people, no matter who they are, that make the proposition. I don't think our schools cost too much, in any sense of the word. Why don't I think so? Because our school system and its efficiency lie at the foundation of every other department of prosperity. If you close the schools you practically destroy the mainspring of all commercial and business activity. You take away the very life, the very vitality out of all the institutions of our country. Cost too much! Take a boy and put him through a course of education which is supplied by our public schools, or higher if you choose, and what have you done for him? You have fitted him for citizenship; you have fitted him for business; you have, in many senses, made a man of him: and I mean to say you cannot spend too much money in making men and women to be future citizens of this country, for without men and women you can have no country. Cost too much! On what is that money spent? Are our schools too palatial and comfortable? I have always said there is nothing too good for the children of this country. True, we want good sidewalks, and we pay for them. We want good waterworks, and still we find the water somewhat mixed with sediments from the Bay. We want good pavements, and those of us who ride a wheel run the risk of getting our necks broken sometimes. Cost too much! Look at the school-houses of the City of Toronto. Toronto to do the respectable thing towards its public schools should spend \$250,000 within the next twelve months on public schools in this very same city. Cost too much! Why, there are teachers in the City of Toronto who are not paid as much as the janitor who sweeps the school-room. Does that cost too much? I think we are exceedingly parsimonious. I should go much further in many respects, not only in teachers' salaries, but in the accommodation we provide for our school children, in the desks, in the appliances. How many public schools have all the maps they require? How many public schools are heated and lighted as they ought to be? How many have all the comforts and conveniences, which these children have who spend six hours a day there? We are far more economical

in this respect than are the people on the American side, and I hope they do not feel that they cost too much. Let me repeat: There is no investment made in any department, of a public character, for which you get such immeasurable returns as you get for the education of the people. (Hear, hear). Look at any country you choose on the broad face of the earth, and tell me what countries take the leading place in the great procession of nations. When Fechte laid the foundation of the German schools after the Napoleonic wars of 1807 down to 1814 what did he say? He said, "We are not able to meet face to face on the battle fields of Europe, but we will educate the German people, and the time will come when Germany will take her place in the great procession of nations." And three decades, four decades, five decades, had scarcely passed until before Sedan the forces of Germany vindicated their right to be counted the first empire of the continent of Europe (Applause). What did it? It was Pestalozzi. It was the schools of Germany that gave her her supremacy; and to-day in her commerce she is encroaching on the preserves of England; and her shipping, and her colonies are marching to the conquest of the world. But I need not dwell upon this. We the Educationists, the Teachers, and I believe the people of this country, feel that we get good value for all that the schools cost; and, if I had my way, the schools of this country—and I say it without any reservation, and with a full sense of all the responsibility—if I could I would have the schools cost a good deal more, because I believe by costing a great deal more they would be a great deal more efficient than we can make them on our present slender income. (Hear, hear).

We welcome you, then, as the teachers of this country, because you are the helpers of our school system, the exponents of the work we are trying to do here. This is my summary of the situation. The Education Department may be faulty in its regulations. Parliament may be slow to legislate as you think parliaments should legislate. The rate-payers may not be as generous towards you as you deserve. The Minister of Education may not be so progressive as this country requires he should be. But, if by some means or other we can place in every school in the Province of Ontario a trained teacher, then we have won the victory; then the regulations and the legislation of parliament and trustees and all other things count for but very little in the great work which the teachers of this country are carrying on. You are the leaders; you are the missionaries. As I have said, perhaps even in this hall before, if the teachers of the Province of Ontario

were determined that the public sentiment of this country, on any educational point should be changed in the next five years, then I say it would be changed, because in your respective spheres your influence is so great, if you only choose to exert it, that you can accomplish far more than perhaps you have any idea of. Place in a little school, in the remotest part of this country, say a young lady well educated in her High School and well trained in our Normal Schools, and let her have a missionary spirit, and what do you behold in six or eight months? Just what I have seen often while I was inspector. You behold a neglected school yard made tidy and cleanly; you see broken fences repaired; the gate that had not swung, for weeks upon its hinges is now in its place; and altogether the external appearance of the school has been completely metamorphosed. Go inside and what do you find? You find the same change—the school-house swept regularly; no litter on the floor; the teacher's desk tidy; you will even see a change in the personal appearance of the pupils. Is that all? You will find an interest in the work in the section. Mrs. So-and-So comes in and spends an afternoon with the teacher. Mr. So-and-So, who would before have considered it treason to darken the school-house door, pays her a friendly visit, and she returns it; any man with any self-respect recognizes her as the greatest force in the section; and if she does not capture all the old ladies, she surely captures all the young men. How? Because she has been an educational missionary. There has gone out from her every day a potency that has transformed, not only the appearance of the school-room and the grounds, but has transfused itself into the thoughts and feelings of the rate-payers. Now, we have ten thousand such, more or less, and if they exercised their influence with a view to bring about the changes I have indicated, I do not know to what extent our educational system would be developed. We welcome you because of the power you possess in this respect as the great constituency on which depends the future evolution of our school system. Dr. Loudon catches the product of our schools when you have almost fitted it for universal conquest. He takes it in at an age when it is less plastic, but he takes it to put on a few finishing touches—most important in themselves, to be sure—but the boy's character is largely fixed before he goes to the University; and he is manly, and he is reliant and respectful long before he reaches Toronto, if you have influenced him as you should. You got him in the kindergarten; you had him for ten years, perhaps, in the public school; somebody else had him for three or four years in the high school. Why, his

gristle has become hardened ; his vertebrae have become somewhat fixed ; it is hard, then, to change his methods of thinking. He goes through the University and becomes the better for it—and we cannot have too much higher education any more than we can have too much elementary education ; in my opinion the two go together ; they are as necessary as the sun and the moon to our solar system ; the one is the complement, in a certain respect, of the other.

Now, we welcome you because of the great work you do in preparing our young men, not simply for the higher education for that is not entirely your work, but for the citizenship out of which or by means of which the destiny of this country is, in future, to be directed. You are the nation builders ; you are the founders of empires ; you fit men and women for government, for the social circle, for manhood, for womanhood ; and we welcome you as the artists, the sculptors, the painters, the men who, upon the canvas of the mind, put pictures that eternity will not erase—the chisellers, who, out of sometimes crude material, form something so beautiful that angels desire to look upon it. This work is the work of the teachers of this country. You come here, perhaps, some of you, simply to enjoy a pleasant hour. That is a proper motive. The teacher needs his holiday if anybody does. I am glad that I was able to persuade Parliament to give you a full week at Easter. You need it—not that you look tired—not half so tired as the member of parliament does at the close of a session—not that you are pining for the green fields and for the music of birds and for the comradeship of old friends ; not at all. You are happy in the school-room, but you will be happier when you return, because of your brief holiday ; and I hope in this beautiful city you will see enough to make your stay pleasant, and have associations enough to make the reminiscences of this meeting pleasant likewise. Some of you may have come to receive instruction as to the great art of teaching. No doubt you will learn a great deal. There is not just the esprit de corps amongst the teachers of this country that one would like ; but I don't know that there is anything in this country right any way. But we do say that the teachers have not that professional esprit de corps, that enthusiasm ; they do not love their work. Well, they cannot always love their work. Their work does not always love them, may be—does not remunerate them enough ; may be Mrs. Grundy rebukes them somewhat unkindly for services not rendered, or for services not rendered according to the specification of the said Mrs. Grundy ; but, nevertheless, I hope if you have

come here for instruction that you will receive that instrucion. The Education Department laid it down fifty years ago this very year that the successful teacher is a trained teacher, and we believe that that training goes on, not only as a matter of experience, but as a matter of learning. You have your libraries; read them. You hear papers here; listen to them. Bring fresh thoughts with you. The greatest temptation of the teacher is to revolve upon himself—to make the little circle of his daily work the end-all and the be-all of his existence. That will not do. There must be no circuit of this sun. There must be no limits to your orb. There must be a fresh track made every day. You must lift yourselves out of yourselves, as Dr. Arnold says, and go down to your school-rooms each day, not the teacher of yesterday, but revived and rejuvenated by thought and study and meditation and proper physical exercise; and, in this respect, the work will be less irksome. Some of you may have come to criticise. Good and well. These things are, within proper limitations, just as much a matter of duty as commendation or anything else. Criticism is useful, and I, for one, dearly love a critic. He points out mistakes that I have made, or warns me against mistakes that I might make, and so on. In fact we know that the work of the teacher is largely criticism from nine o'clock in the morning till four o'clock in the afternoon; and if he has occasionally a severer tax of that than at other times we know that it is an incident belonging to the profession, and it is exceedingly useful. But whether there be criticisms, they shall pass away; and whether there be complaints, these shall cease; but we know that the work of the educationist shall endure forever—and that is the work that you are here to do. And we welcome you. If there is aught that you wish in the way of comfort that we can bestow upon you, it is yours for the asking. We have endeavored to re-fit this old building in memory of its fiftieth anniversary, that it might be more attractive to the teacher. We want to make this a Mecca for the teacher. We want the Normal School teacher to feel proud of his alma mater in more senses than one; and wherever you go I am sure that those of you who have taken the course of training here or at another normal school, will always revert to these associations with pleasure. I am glad to have this opportunity of looking once more upon those who were my fellow professionals, some of them, with whom I had the honor of being a member of that profession. I have already seen some of the old comrades of 1869, when I was a student at the Normal School. I want our Normal School to be remembered. I want that we shall celebrate

the jubilee of that Normal School this year in appropriate way ; and I shall be glad to receive suggestive hints from you such as will enable us to do so. While you are here, then, enjoy yourselves. Remember that you have now the freedom of the City of Toronto. Remember that you are free from molestation upon the public streets. I shall guarantee you protection within the walls of St. James' Square. (Loud and continued applause).

PRESIDENT DEARNESS, in response said :—I have the honor on behalf of the Ontario Educational Association, to thank Alderman Hallam, representing His Worship the Mayor of Toronto, for the hearty welcome he has given this Association. I am sure we appreciate the compliments he has paid to the good looks of the ladies and to the serious and spacious brows of the rest of us ; and we appreciate them none the less that we know that these compliments are well deserved. To post Alderman Hallam, on the objects of this meeting, I may say that for thirty-five or thirty-six years the best men and women of the Province have met in convention to exchange their views on educational questions and reawaken their enthusiasm ; that representatives and delegates from almost every town and city and township have come here ; that those have gone back to their local associations carrying the inspiration received and the widening views they have obtained in these conferences ; that from these local associations these broader views have been carried into every school section by these ladies and gentlemen whom you have complimented to-night. New educational ideas have been discussed by this means and by the press, and these ideas have worked their way back again to Toronto and in the halls of legislation have been crystalized into statutes. The grand picture that has been painted to-night by the Minister of Education is due, in large part, to the important work that has been done by this Association from time to time at its many meetings in years past. Now, we are proud of our past record—of each and every year of it. Just look at the Minutes of our last convention. Now, sir, you, the founder of the largest free library in the Province, have a reputation of knowing a good deal about books, and I beg to submit that any association capable of producing, as a record of part of its proceedings, a volume as worthy as this (holding up a volume of the Minutes of 1896), deserves all the praise, Alderman Hallam, that you have bestowed upon us. In this volume you will find hundreds of pages just as interesting reading to-day as they were last year. Balmy breezes from the heights of Parnassus. Here are the titles

of a few of the chapters :—“Influence of the Kindergarten Spirit”; “Matthew Arnold”; “Shakespeare’s Writings”; “A Day with Homer”; “The Women of Homer”; “The Monroe Doctrine”; “The Early Schools of Niagara”; “The Causes of the German Reformation”; “Elements of our Population”; “National Patriotism”; “Parent and Trustee”; “Children’s Rights.” I have very much pleasure, Alderman Hallam, in presenting you with this volume. We can in a very emphatic way indicate the growth of this Association, by showing you a copy of our Minutes of some years ago. (The speaker held up a thin volume of a former year’s proceedings.) As readers of the metropolitan press we are familiar with your name as an alderman, and as the founder of the free library of the city of Toronto—the best in the Province. We were pleased to see a leading writer in the Review of Reviews compliment Toronto as one of the two cleanest cities on the Continent of America. Clean Toronto! That does not seem to sound as familiar as “Muddy York!” All the more credit to its municipal fathers who have transformed the muddiest of towns into the cleanest of cities. And while Toronto’s civic managers deserve unstinted praise there is a circumstance that puzzles the readers of the public reports and to which I am tempted to refer by the reminder of the Minister, that you are a controller of the police service. Last year out of 8,000 cases of truancy reported in the Province, over 6,000, more than three-fourths of the whole number, were in the City of Toronto. It is praiseworthy of your teachers that they discharge their duty so faithfully in reporting truants. On whose shoulders does the serious blame rest that no action was taken to punish the offenders? I believe if you were to take hold of this matter with your characteristic energy that you would remove this reproach from the fair capital of the Province. For the Association, I thank you again for your kindly welcome. The Minister of Education has told us that he wishes to make this beautiful place a Mecca for the teacher. Toronto is now the Mecca for students and teachers of this Province. By the growth of her institutions, the development of her colleges, libraries and museums, we hope that this city of schools, and colleges, and beautiful streets, may become the Mecca of the scholars of the continent.

We thank you sincerely, Dr. Ross, for the gracious and eloquent welcome you have tendered us this evening. Not many in this audience are better acquainted with your devotion to the cause of education, for education’s sake, than myself. When I began teaching I was stimulated by the reports of your success in a neighboring

country school. Later I lived and labored in the same town with you, and was a witness of your earnest devotion to educational work six days in the week, and in Sunday School on the seventh. I know how cheerfully you responded in those days, without expectation of fee or reward, to the requests of neighboring associations for assistance at their conventions, I saw you at cost of time and labor, and at financial loss, carry on the first independent educational journal published in the Province; a journal that was as fearlessly, energetically and efficiently conducted as any of its successors. Like a larger number, I was a witness of the skilful manner in which you launched our County Model system. Our school system is an eclectic one, copied from many others and harmoniously blended by that king of organizers whose heroic statue overlooks the front of this square, but only of that feature called the County Model School we may claim the honor of being the inventors. I do not know in whose mind the idea was conceived—doubtless it was at one of the meetings of this Association—but I do know that the giving of the idea a permanent place and effective life in our school-system was due very largely to the present Minister of Education and his colleague, Mr. Tilley. (Applause.) I know the site of the rural school-house where was held the debating society in which you tried your first experiments in oratory, and several of the patrons and pupils of that school. The rule that the prophet is not without honor save in his own country, has its exception in your case, for nowhere else is your name held in higher esteem than in that neighborhood where the people knew you so well as a young man. But, alas! since then you have become a politician (laughter) and now your actions are appraised too generally from the party rather than the educational point of view. Speaking for this Association, while we would not be unanimous in admitting that everything you have done has been the wisest, I believe we would all concede that you have been zealous and tireless in your efforts so far as in your power lay—and the power of even a cabinet minister has its limitations—to promote the welfare of education in each and all of its numerous departments.

I am proud that the man who can welcome us as Minister of Education has been a country school teacher. The country school teacher and the pioneer have made this province of natural advantage the fairest in the Empire that engirdles the globe. I am proud too that you have graduated from the active membership of this Association. For years we met you here as one of ourselves; at the past fourteen or fifteen annual conventions we have seen you go from section to

section of the Association listening to our grievances which we have never hesitated to tell and taking our advice at least into serious consideration. We have to thank you for the encouragement and liberal aid you have given the Association, and for the freedom of these fine buildings. (Applause.)

*EXAMINING OTHER SCHOOL SYSTEMS TO IMPROVE  
OUR OWN.*

BY JOHN DEARNESS, I.P.S.

*Ladies and Gentlemen* :—I take this first opportunity to thank you cordially for the distinguished honor you conferred on me last year by electing me to preside over your deliberations. Teachers and Trustees are not alone in regarding this assembly as one of the most important that convenes in the Province. In an equitable and comprehensive way it fairly represents every interest embraced in our complex system of education and therefore, in respect both to the number and character of the persons in attendance and to the vital importance to the country of the various subjects debated, the annual convention of the Ontario Educational Association takes rank second to no other in the Province.

At these meetings the administration of all classes of schools, and the ways and means of equipping and maintaining them in efficiency, are exhaustively discussed in the Trustees' Section; in a dozen other Sections the aims proposed, the methods employed, the results achieved in the kindergartens, in the elementary public and separate schools, in the secondary schools, in the colleges and universities are marshalled and sifted, and thus the tried and true wins its way to notice, acceptance and permanence and the specious and useless is detected and cast out.

The statement that every interest is represented, needs the qualification that the technical schools, including the School of Practical Science, Manual Training and Art Schools have not yet organized a Section. When they do organize and enter the circle of the general association they will receive an impetus that will greatly extend their influence and usefulness.

Besides the public advantages that accrue from these conventions, there are professional ones that justify their cost. Ardent men and women come here and kindle all around them with their enthusiasm. We all feel our zeal renewed along the good old lines and healthfully stimulated in new directions. Here, more than anywhere else, is kept alive a professional *esprit de corps* which we regret is not more vigorous. Last, but not the least precious result, is the opportunity

these meetings afford to exchange experiences with, and enjoy the good fellowship of those who are sharers of similar responsibilities, difficulties and pleasures I have often felt surprised at recognizing how intimately I seem to feel acquainted with someone whom I have met only at a few of these gatherings. If the sessions in these halls, which are the *raison d' etre* of the Association, were to cease to have any interest for me, I should still attend the meetings for their social value and pleasure.

A tempting subject for a presidential address to one who has been for twenty-seven years an active participant in the work and development of this Association, would be a retrospect of a quarter of a century of its honorable history, but with the spirit of the Association, I prefer to look forward rather than to dwell on the past, however creditable that past may be. My paper may be described as "Examining other school systems to find means of improving our own in features viewed from the public-school stand-point."

Lest from the opinions offered herein, I should be thought pessimistic, I beg to state my conviction at the outset that, all things considered, Ontario has the most excellent system of public education in the world at the present day. That conviction is based upon the study of official reports of various states and countries, upon observations of children whose education had been partly obtained elsewhere before they entered schools which I visit, upon the success achieved abroad by young people who have emigrated from this Province and upon the record made at world competitions when Ontario has placed such products of an educational system as can be put in show cases and tabulated and printed, side by side with the similar products of other nations.

In the last such competition Ontario fairly bore the palm in the importance of awards given, notwithstanding that our schools did not do themselves full justice. Toronto's public schools and those of other important districts contributed nothing, the universities were not represented, and of what was offered only that from Hamilton was so arranged that a foreigner could plainly see the character of the work accomplished in each year and grade, in the kindergarten, elementary and secondary schools. Prof. W. S. Monroe, in an elaborate report reprinted by Commissioner Harris, states that "Those who remember the excellence of the Canadian Educational exhibit at the Philadelphia Centennial in 1870, are not a little disappointed with the present display," that "the Ontario exhibit is weak" and that "the Province of Quebec makes a fuller and in some respects a better

exhibit." I quote this disagreeable opinion to show the danger of resting on our laurels. Success and approbation stimulate some individuals to greater exertion but self-praise and satisfaction deaden the ambition and energy of communities.

In many important particulars

#### ONTARIO'S SCHOOL-SYSTEM LEADS THE WORLD.

Where else can be found one at once more flexible and yet more stable? Here we have a large measure of local control in important matters like taxation and choice of teachers, vested in the corporate units, a measure reserved to the township councils, still another passed on to the county councils, and, where general uniformity is desirable, for example in the matter of text-books and the certification of teachers, the authority is centralized, thus happily linking individual, municipal and national responsibility. I might continue enumerating excellences—twenty of them to every defect, quite the proper thing to do before a foreign audience, but we are here to make good better, and to try to discover and remove defects.

Probably if we studied the school systems of other nations with impartiality we should find some feature in every one of them that we might copy with advantage. Sweden can lead us in physical and manual training, Britain in school sanitation and the practical education of girls, Germany in deportment and compulsory attendance, France in agricultural and technical education, Nova Scotia will show us how to teach elementary science, while Manitoba has improved our own public school course, eminently combining aims of utility and culture.

#### SANITARY SCHOOL-HOUSES.

The British code of regulations for day-schools provides that "All new school premises and enlargements must conform generally to the rules contained in schedule VII. and the plans must be approved by the Department before such premises and enlargements are passed under this article." The rules and principles of construction are explicitly laid down. Each school-board is at liberty to exercise its discretion in style of architecture and the details of construction so long as the prescribed rules and principles are duly observed. To prove that these rules are carried out, plans of the site, showing position of out-buildings, drainage, entrances, etc., of each floor, of sections and elevations and of fittings for heating and ventilation must be submitted to the Department. Mere pencil sketches or diagrams

will not be accepted but they must be accurately drawn to scale in ink. Windows directly in front of the children will not be permitted ; fresh air inlets must provide a minimum of of  $2\frac{1}{2}$  square inches for each pupil and foul air outlets a nearly equal minimum ; water-closets must be constructed and maintained on sanitary principles. The statement of these rules relating to lighting, warming, ventilation, seating, sanitary arrangements, etc., occupies four pages of the code. What an inestimable boon it would confer on the rising generation of this Province if such regulations regarding school buildings were in force here. Our rural school buildings and grounds generally and much of our urban school architecture too, are not a credit to our Province, particularly the oldest and richest parts of it. It is the exception to hear of a rural school house provided with adequate means of ventilation in cold weather. One may find school-rooms with children sitting facing a window ; I have seen children in such a room with shaded eyes peering and straining to read the writing on a blackboard having a window in the middle of it. Securing the proper construction of new school buildings is a legitimate and practicable function of the Education Department and Boards of Health. In unsanitary surroundings children cannot thrive well either intellectually or physically and teachers cannot teach and govern well. It may be said that teachers do not lose much time through sickness. Consider that their average experience is only about three or four years and these in the prime of their youth. Even workers in the lead mines may not lose much time through sickness in their first few years. But who will dare to say that teaching and governing, day after day, in an over-heated atmosphere laden with chalk-dust and floor-dust and with the breath and body emanations of fifty children, is healthful work ? It is proposed to give school-boards diplomas for keeping the premises and school-houses in a clean and wholesome condition. Upon some school-boards from the first, and upon many others after the novelty wears off, the diploma is likely to exert but slight influence. But why should school sections get diplomas for simply doing their duty as required by the regulations ? I think the British method of plainly indicating what is required, and exacting the standard at the peril of the forfeiture of the grant, decidedly more effective.

#### COMPULSORY ATTENDANCE.

The most formidable obstacle to the progress of the public schools in Ontario is irregular attendance. The official reports show an

attendance not exceeding in any year 56 days out of 100 on the average. Had we the Prussian law, which taxes the parent according to a prescribed tariff for each and every day's unexcused absence, or a better one, this serious obstacle would be overcome. It is true we have a compulsory law, but it is a dead letter in rural districts, and has but little vitality in many urban ones, not because it is contrary to the sentiment of the people nor in advance of it, but because the act lacks effective provision for its enforcement.

#### NEED OF MORE SCIENCE.

Compared with the course of study of several other countries ours is weak along the lines of elementary science. Time does not permit me to put in evidence the courses in science prescribed in England, France, Germany and Manitoba. I refer you to the Hon. Dr. Ross' work "The Schools of England and Germany," and the official syllabus of the Prairie Province. To do justice to this point would occupy more than all the time allowed me. It is true there is some natural science prescribed in the High School course but certain conditions defeat its producing its best educational results. One is that so strongly emphasized in the report of the Committee of Ten on Secondary School Studies. The conference was unanimous that nature-study should begin in the first class of the primary school and be pursued steadily throughout the whole public-school course. So strongly was the necessity for this preparation felt that the committee actually devoted more space in their report to the prescription for a suitable course for elementary, than for secondary schools.

Another serious hindrance is that teaching natural science for our present examination results, renders it well nigh impossible to teach much of it in the best way. I should greatly prefer to have my child taught the life-history of a few plants or of two or three insects, by well-directed observation intelligently exercised upon a series of related phenomena, by which his senses will be quickened, by which he would experience the joy and impulse of discovery, by which he would have practice in relating cause and effect and surmising law and lucidly and carefully expressing his judgments—I say I should much prefer to have him taught thus, though it took him all summer to learn what I could tell him in an hour, than to have him spend the same time in storing his memory with book-fuls of scientific knowledge. When the main object is preparing for an examination, which measures *knowledge* rather than the *means of acquiring* it, the

teacher cannot be expected to keep the pupils busy for a week in discovering what he can tell them in a lesson. In a work recently prescribed for intending Normal School students, the author—Fouillee—has a very low opinion of science studies. His contempt is not to be wondered at if he has formed that opinion from specimen lessons he has presented in his book.

A third hindrance is that more is expected of the teacher of science than he can possibly accomplish in the right way. I believe that sixty students can be carried along by one teacher in mathematics or the language subjects as easily as ten in science.

It is not difficult to see why the attempts to introduce science into our public schools have proved futile. No subject can long hold a place on our course of study solely on utilitarian grounds, unless like spelling it is a necessary means to an educational end. Agriculture, manual training, even cookery cannot be maintained in the public schools if taught merely as arts. Of course an examination can be put in the way as is done with temperance and hygiene and the pupils told that they must take it; then they make a virtue of necessity with poor enough results. I have no wish to see mere text-book science in our public schools, indeed there does not seem much danger of it in face of the history of the several unsuccessful attempts to introduce agriculture by the *ipse dixit* method. But I have confidence that the time is not very far distant when science teaching along the lines of nature-study, with an emphasis in the direction of agricultural science, will occupy an important place in our public school curriculum. When that time comes, if along with it shall come the opportunity, through such agencies as the continuation class, for boys to continue their studies in the winter and assist on the homestead in the summer, thereby gaining that skill in operations, with power of endurance and hardening of muscle which renders farm-life not only tolerable but agreeable, then we shall have an increased number of educated boys who will stay on the farm. It is useless to deny that the tendency of the conditions under which secondary education is at present acquired is "away from the farm." Not the education itself, be that distinctly understood, but the conditions, particularly the one that makes the farm-boy a town-boarder for two or three years, has that result.

No other studies than physical and natural science can better train to discriminate the accessory from the necessary conditions of a complex series leading to any particular result. One could scarcely imagine that a mind well trained in this important exercise, would,

knowing all the facts, commit such a mistake as did a judge last year, who having to condemn three or four youthful criminals and learning that they had been in the public schools, charged their crime indirectly against the school system. Had he inquired he might have discovered that they had attended sunday-school or church or dined on potatoes, any of which would have been as blamable as the cause he connected with the crime.

Fouillee, above quoted, and others place too low a value on science as a means of culture. Readers of Thoreau and Emerson and Burroughs, of White of Selborne, and Richard Jeffries, and Ruskin hold a different opinion. I share the pity of the poet for the man who can see nothing in the "primrose by the river's brim" but a patch of color. Surely the reverent contemplation of God's love and wisdom in Nature should have as elevating an effect on the mind and soul as the study of the deeds and words of men—even of the Greeks.

"I love not man the less but nature more  
From these our interviews, from which I steal  
From all I may be, or have been before,  
To mingle with the Universe and feel  
What I can ne'er express yet cannot all conceal."

#### LOSS OF TIME IN LEARNING SPELLING.

Observers have remarked that, as compared with the Germans, we are handicapped by our method of teaching spelling; some of them placing the loss of time as much as two years. In practice while we neglect science, we certainly give an exaggerated distinction to spelling, a subject that has the least intellectual value of any on the course, and yet to only one other are more time and application devoted. At the entrance examination a candidate has a chance if he answers two out of six parts in any other subject than spelling, but in that he is plucked if he does not answer five out of six not to speak of the toll he is taxed for poor spelling in all the other subjects, and that, too, in the face of the well-known fact that difficulty in learning our irregular, arbitrary spelling is frequently due to almost insurmountable physical defects. Spelling is useful only as a means of expressing thought in writing. I have never yet received a letter so badly spelled that I have missed its meaning or lost time in reading it, but many so badly written as to produce both these results. I remember an old school master who dictated corollaries to the definitions in Lemmie's grammar. "Grammar is divided into four parts, viz., orthography, etymology, syntax and prosody," to which he added

"but the greatest of these is orthography." And so it seems to be even unto this day. Fashion scowls fiercely on poor spelling but she smiles on undecipherable writing.

#### DRAWING.

Drawing, an important mode of expression, occupies in the public schools a great deal of time and produces very incommensurate results. Nine-tenths of the work is the merest mechanical copying. Many candidates whose copying in the books receives eighty per cent. fail to get twenty per cent. on the part of the examination that is a real test of training. The present system of examination in that subject is partly responsible for the failure to produce good results. This remark applies also to the public school leaving examination in book-keeping which is to be reformed in 1898. Why should not the reform take effect this year?

#### EXAMINATIONS.

This brings me to Examinations about which much wise and otherwise, has recently been said and written. If they are an evil they are a necessary one and up to the present time the best means discovered of stimulating the diligence of teachers, of securing the systematic and sustained work of learners and of discovering and eliminating unqualified aspirants to professional offices. So far as I know the most extensive system of examinations is that conducted by the Regents of the University of New York State which embraces not only academic examinations but also those for law, medicine, dentistry and veterinary science. Last year the Regents printed nearly three million question-papers as against eight hundred and fifty thousand by the Education Department of Ontario. Ours, while less extensive, is probably more systematic and exact. It affects only one stratum of the public school work and of the High School work throughout, but that so profoundly that it is said to be daily invoked by name in the first term and two or three times a day after Easter. One teacher said "I am conscious of it every time I meet my class." Many of you here know whether his experience is exceptional. Neither its friends nor its foes deny the constancy and potency of its influence, and seeing that this is so great, it needs no argument to prove that every modification of the system, no matter how slight, is fraught with important consequences for either good or evil. Learners and teachers cannot do their best work if the examination becomes the dominant aim; assimilation is liable to give place to "cram" and the effects on the minds of all and on the bodies of nervous pupils are injurious.

Inspector Fitch, of England, is quoted as saying that for every one whose health is injured by too much mental exercise, twenty suffer from idleness and inaction. His observation was not based on students of the Canadian temperament. Even if it were true of Canadian pupils it is worth while to try to save the one as well as the twenty.

It has been shown that the best work in science cannot be tested by a written paper, neither can the finest quality of the work in literature be so tested. A boy exclaimed, "Oh, mother, we had such a beautiful lesson to-day on the Story of a Drop of Water, do let me read some of it to you!" Another boy said "I hate that old Story of a Drop of Water," and yet the latter passed the better examination on it. Education of the affections like that of the senses refuses to be rated in per cents. The examination is here to stay, and, while acknowledging the great good it has accomplished, I believe that besides certain unavoidable evils, it is marked by some removable ones. More work is undertaken each year than the average student can assimilate. A healthy attentive pupil may acquire knowledge rapidly but education, like all other growths, requires time. It is better to be a wise man with little knowledge than a learned fool. Model School Principals and Inspectors have time and again deplored that many who enter the teaching profession are not thorough in the subjects they essay to teach. Why should they be thorough when they attempt to go over all of such and such a course but are told it is enough to half or third know it; indeed they win honorable distinction by showing that they know two-thirds of it. Better results would come by exacting greater thoroughness on a less extensive course, a higher percentage on easier papers.

From the point of view of the public school interest, the chief evil of the present examination is the inadequacy of the standards to secure proficiency in the subjects that teachers have to teach. One of these subjects does not appear on the course at all, three others are dropped at the level of the fifth class in the public schools. Arithmetic and mensuration are carried but a grade further, leaving the pupils mere problem-solvers with little or no knowledge of the beautiful science and philosophy of the subject. The reply is that Latin, French and Greek will, besides affording a special valuable culture, so sharpen the students' wits and train their powers that they will be pretty certain to overcome easily the difficulties in teaching the subjects which are more or less slighted on their examination. I have no controversy with the classics, but on the contrary, the highest respect for these studies. Lord Chief Justice Coleridge, in an address

at Yale, declared his conviction, probably with good reason, that he attributed his success in life to his having made it a religion never to let a day pass without reading some Latin and Greek. But I do not believe that for considerations of any kind the time and effort that will likely be devoted by an intending public school teacher to the three languages above named will be as valuable as if these had been given to a more thorough study of arithmetic, history, civics and elementary philosophy, including ethics and psychology. These would have high values of culture and utility, whereas the only serious value of the linguistic studies, so far as they are taken in Forms I, II. and III., is as promotion to the advanced study of these languages. Fouillée, who diagnoses national and educational ills in a masterly way, reminds a reader of a patent medicine almanac, in that he cures or ameliorates them all with one remedy, viz: classical studies. Hear what this same Fouillée says, and if you believe him you must accept his dictum as clinching my argument in favor of differentiating the examination of those who are leaving school to become teachers from that of those who are trying for promotion to a college course. He declares that "Latin loses all its virtue—its gradual development of the intellect and taste—if it is reduced to a linguistic indigestion of two or three years, as a mass of words and phrases to be lodged in the storehouse of the memory. Thus understood and falsely assimilated to the study of a modern language, *the study of Latin would be more harmful than useful.*" If this distinguished teacher and philosopher, who rates classics so highly, is right in declaring that two or three years of Latin is more harmful than useful, then why should our rural school teachers waste that much time when other humanizing and necessary studies could be pursued in it with great advantage?

#### MORAL INSTRUCTION.

Ethics should come in the course of philosophy for teachers' non-professional certificates, and I believe that a book of well-chosen systematic ethical readings would very usefully supplement the indirect moral instruction now given in the public schools. Every one present will join in the desire that Ontario may yet deserve the compliment paid by Dr. Hall to the Germans. He said: "No feature of education is more important or more cared for in Germany than the manners and deportment of the children; one may travel in Germany and visit schools for weeks and not hear a vulgar expression or see a rude act."

Occasionally from certain clergymen there arises a clamor for

formal religious instruction in schools by the regular teachers. This agitation would be dangerous to the harmony and success of the schools only that nobody else than the agitators seems to be excited by it. Some of these good people would lay burdens on the teachers that they do not seem willing to touch although the school-law offers them very reasonable opportunity. One reverend member of a deputation to the Government who came from my own county was reported as bewailing the disuse of the Bible in the schools and deplored their growing godlessness. At that very time the Scriptures were daily read in the school of his own district which he was never known to visit in the school hours while he resided there. In view of these recurring criticisms and such an utterance as that by a judge at the Wentworth assizes last year, already referred to, it behooves us who know the truth to proclaim from time to time that our schools are religious and christian, that the devotional exercises—and these are reverently conducted—that the subjects and methods of study particularly in literature, the precept and the example of the teacher, the community of spirit and even altruistic sentiment that may now be frequently observed in the intercourse of the children all make for righteousness in an effective way. “The letter killeth but the spirit giveth life.” In my judgment this Association stands not only against those ecclesiastics who would make catechists of the teachers, but also against those secularists who would not permit us to invoke the divine blessing on our daily labors. It stands somewhere near a liberal interpretation of Dr. Parkhurst’s position:—“Every school maintained by the state should inculcate the principle of dependence upon God and obligation to Him. These things are essential to sound learning and safe citizenship. This is psychology not propagandism—patriotism, not piety. Such teaching is not so much for the purpose of keeping children out of hell bye and bye, as for the sake of keeping hell out of them now.” Our free schools are the staunchest bulwark of our national morality and permanence. May they never suffer an invasion of either a sectarianism or a secularism which would disturb their harmony and destroy their usefulness. “Armories and arsenals and fleets of war ships may give an external prestige and grandeur to a nation, but the best defence that any country can possess, is an enlightened, moral, and law-abiding citizenship; an intelligent, laboring population, a free and complete system of education, so unsectarian and non-denominational as to meet the just demands of every faith, and of every rank and condition of life.”

*CITIZENSHIP AND HIGHER EDUCATION.*

HON. GEO. W. ROSS, LL.D., MINISTER OF EDUCATION.

The title of my address must not be understood as meaning that a superior education is an indispensable qualification of citizenship. Neither must it be understood as meaning in all cases that education alone qualifies for citizenship. In our complex conditions of society there is happily a place for almost every grade of intelligence. Were it otherwise, I fear many would fare badly. What I mean by linking higher education with citizenship is that the most effective evolution of the State is not possible without higher education. Even without assuming that illiteracy and crime go hand in hand, we must admit that the training of the school-room is a great moral therapeutic, that it subdues, restrains, and refines those who come under its influence, and that it contributes to law and order in the State by giving an experience of life and its obligations, which is invaluable to every grade of citizenship.

The extent to which the State should interfere with education is a question on which there is much difference of opinion. If the State had no higher duty to discharge than to classify its subjects and say to this group, "Your duties are menial, you shall be hewers of wood and drawers of water"; and to another group, "Be content with your lot, the shoemaker should stick to his last," it would greatly limit the sphere of its educational activity.

For many centuries this was practically the attitude of the Governments of the world. The so-called privileged classes guarded every avenue to promotion, and if any person more resolute than another "broke his birth's invidious bar," it was to find himself ostracized so far as the ranks which he had invaded would dare to do so.

But happily we have outlived this condition of public sentiment. That a general education is the birthright of every citizen is now all but universally admitted. The State, contrary to the teachings of Spencer and John Stuart Mill, has assumed the guardianship of every child during a certain period of its life, and offers it, nay, in many instances compels it to receive a liberal education. And here the question arises, should the State withhold its bounty when the limit of an elementary education is passed, or is it under obligation to provide facilities for the further development of the mind and

character of its subjects through the agency of High Schools, Colleges and Universities ? Now the answer to this question will depend largely upon our conception of a State. If all the duties of citizenship could be discharged by an elementary education, then we might fairly argue that the responsibilities of the State ended with the elementary school. But who will say that in the complex organization of a modern State nothing further is required ? There are problems of government, of administration, problems in science, in engineering, in civil government, which must be solved, and for their solution a higher education is necessary. Take out of Canada every man who fills a position for which he has qualified himself by a College, or University, or professional course of training, and how long would the institutions of Canada last ? All our pulpits would be vacant, our courts of law would be closed, our professions would be deserted. Every engineer and doctor and teacher would be dismissed, and we would be reduced to a dead level of mediocrity which the most advanced socialist could scarcely contemplate without shuddering.

#### THE STATE SHOULD AID.

It is therefore clear that, whether admitted or not, the State is the gainer by all educational agencies, and as it shares in the profits why should it not contribute to the cost ? It may attach conditions to its bounty, it may insist on a certain amount of control. That is not unreasonable, but to accept the honors and influence of an education to which it renders no aid would certainly not be a very generous course of procedure.

The discoveries of Pasteur, and Lister, and Simson, and Faraday, and Bessemer, and Morse, and Bell, were not mere accidents. They were the products of years of toil and patient investigation. And who can estimate their value to the State in the saving of life, and in the enhanced value given to raw material ? Huxley said : " I repeat what is my solemn conviction, after the most mature consideration, that if England could get a Faraday, or a Davy, or a Watt, for £100,000 cash on delivery, she would have made a good bargain."

Now if further conquests are to be made, if the realms of nature still unexplored are to be investigated, if problems which still perplex the scientist are to be solved, where shall we look for the paraclete, for the deliverer, if not to our Universities, to our great seats of learning, where nature is interrogated by men devoted to deep study and earnest inquiry ?

## EDUCATION AND CITIZENSHIP.

(1) Let us next briefly consider the necessity for the higher education of our citizens in order that they may rightly discharge their political obligations. The first law of nature and the first law of every Government is self-preservation. The means adopted to this end vary according to the form of government under consideration. A despotic Government trusts mainly to military force. Its orders are given from the lips of Armstrong guns and enforced by cold steel and blazing powder. A constitutional Government, whether a monarchy or a republic, governs "by the people, for the people, and through the people." First among the many questions which a constitutional Government has to consider is that of revenue. The Chancellor of the Exchequer must be heard from and his demands are inexorable. And although the imposition of taxes, or duties as they are commonly called, is a political question, it has its scientific side. For many years Canadians expended a great deal of platform oratory in discussing the relative merits of free trade and protection as a means of raising revenue. How was the discussion generally conducted? In a scientific spirit? With a desire to arrive at the truth? Possibly so; and yet it must have struck everybody that those who expressed their views most strongly upon the Government, did so not so much in the public interest as in the interests of the industry in which they were personally concerned. If free trade suited them best they were free traders, and vice versa. Amid all this clamor of trusts and combines the voice of the economist was scarcely heard. No man who from study and training had qualified himself to declare the whole truth for its own sake had a word to say. Is this right? Did the scholar or the educationist do his duty? Political economy may not be an exact science any more than history, but surely it can throw some light on the problems of government which confront us from time to time. And if so, why do those who are qualified to guide, so stubbornly refuse the benefit of their opinions?

Then comes the question of municipal government, with its graduated assessments, its exemptions, its bonuses to railways and industries, its poll taxes, its long credits, its local tolls, its waste of money on public highways, its neglect of parks and drainage and general sanitation, etc. Who among us has made this the subject of careful and I shall say scientific, study. And yet every year we spend \$20,000,000 in this Province to supply our municipal institutions with the "sinews of war." Is it not a reasonable presumption that a few years devoted

to the study of the "municipality" as a State organization, would simplify its machinery, increase its efficiency, and perhaps reduce its cost?

Then follow a group of questions involving the privileges of the citizen. As, for instance, should the franchise for the Parliament of Canada and the Parliaments of the Provinces be identical? Should those engaged in the public service be disfranchised? Should the franchise be extended to women? Should the taxing and borrowing powers of municipalities be limited, and to what extent? Should the poor and the insane and the criminal be cared for by the State or by the municipality in which they reside? Should we have a system of old-age pensions managed by the State? This is certainly a very fruitful field for the economist.

#### KIND OF EDUCATION.

Then there is the vexed question of education. Who will undertake to marshal all the arguments for and against the maintenance of a complete system of education through all its phases and gradations by the State, including arts, law and medicine? Is the State a partner in the education of the people or only a beneficiary? Is the responsibility of the State towards its citizens fully discharged by supplying them with a free elementary education, or does it merely begin there? What is the kind of education for which the State should be required to pay? Should it be purely academic or should it be professional? If professional, where would you draw the line? Has the State any right to give religious instruction, and, if so, to what extent? Should agriculture be taught in our schools, and if so why not other callings? What is meant by the theoretical and what by the practical in education? What is the true relation of examination to education? When helpful to the teacher and pupil? And when otherwise? And so on.

(2) But laying aside for the moment the larger fields in which higher education has asserted its power, let us see if there are not humbler but equally practical and useful spheres in which its influence should be felt.

(a) In the cultivation of the public taste for the products of art. Let me here ask a few questions. Why do municipal and school corporations pay so little attention to the architecture of the buildings under their control? Improvements we no doubt have made in the last twenty years, but not in proportion to our wealth and general

education. Then look at our public parks, our school grounds, such a painful destitution of art galleries, such a monotonous succession of urban rectangles and parallelograms without a monument or a piece of statuary or even a green paddock to divert our attention from brick walls and the roar of the reckless trolley. Why are many of our artists, with gifts which should provide them with a full purse, struggling to keep the wolf from the door? Why are many teachers who spent years of hard study to fit themselves for their profession, not as well paid as the janitor who sweeps the room in which they toiled hard all day? What are our educated citizens doing to remedy these complaints, which I know do not admit of easy exaggeration? Are we growing more utilitarian and less sentimental as we become better equipped educationally? In the multitude of our givings, either forced or voluntary, have we no gift for Apollo? Mercury gets millions while the Muses not a crumb. What have the thousands done who have studied the classics and who know all about the ancient glory of Greece and Venice and the works of the great masters, Angelo and Raphael, not to speak of modern painters—what have they done, I say, to give to their fellow-citizens a glimpse of the classic beauty on which their minds must have dwelt for many years? Even this city of Universities and learning is as destitute of all that pertains to public art as were the Indian villages discovered by La Salle on his journey through Canada three hundred years ago.

#### IT FOSTERS LITERATURE.

(b) Then higher education owes a duty to the State by fostering a taste for literature, and by literature I mean the thoughtful, nutritious and refreshing literature which bears the stamp of unqualified excellence. I am not going to complain of the success of Canadians in the literary markets of the world. For a young country we have not done badly. But what I wish to emphasize is the absence of literary enthusiasm, if I may use such a term, among the young men and women of Canada. How seldom do we meet any person who has imbibed the spirit of any author whom he has read, or who illustrates in his conversation the literary excellence of the texts he has studied. How few of our educational leaders gather around them a coterie of kindred spirits for the purpose of indulging in literary recreation or reflection. How many refuse the spurious coinage of the literary parvenu, trusting to the Queen's English as they would to minted coin for all literary purposes. No doubt we are making progress, and

rapid progress too, in the direction of better literary tastes. The character of the books called for in our Public Library proves this beyond question. Still we are far from attaining to that perfection of knowledge, that relish for the refined and aesthetic, which, like the nectar of the gods, begets a distaste forever after, for less palatable sweets.

I need not dwell upon the national advantages of literary culture. It has been said :

“ They must be free or die who  
    Speak the language Shakespeare spake.”

Pure thought begets pure emotions. The contemplation of lofty ideals, whether in poetry or art, necessarily elevates the character. Who would dare take usury who has studied the Merchant of Venice ? Who would not be resolute and chivalrous who has read the Idylls of the King ? Who would not be contented with his lot who read thoughtfully Gray's Elegy ? If we could plant in the heart or mind of one person in every ten at our schools and colleges this receptivity for the beautiful and refined in literature we would give a dignity, and I might say too a power, to citizenship which it is impossible to bestow in any other way.

(3) Higher education should also furnish citizenship with the highest motive for public and private duty. There is no characteristic of a man more praiseworthy than to have the courage of his convictions, and there is no quality in a man more admired than a resolute and respectful defence of his own opinions. The world owes very little to the rabble, who are Jacobins to-day and Bourbons to-morrow. But the world owes much to the men who contend valiantly for some principle of government, no matter who praised or blamed.

It is the experience of every Government to be confronted with popular clamor for some fancied reform, or for the redress of some imaginary or exaggerated grievance. The restlessness of the Saxon, and his zeal as a political iconoclast, is remarkable. And with the growth of modern democracy, it is more than probable that his zeal will increase. How is this zeal to be regulated ? Is there no danger that the ballot-box—the symbol of universal liberty—may not become the engine of the demagogue, and instead of being the buttress of popular government it may be a petard to cause its destruction ?

With the privileges of citizenship so broadened as they are in Canada the danger is all the greater. Every man twenty-one years of age is either a source of danger or safety to the State. Can the electors be stampeded by any Don Quixote whose fantastic theories of

trade or reform are too plausible to be exposed in a brief campaign? If not, the educationist must do his work and do it well. Firmly and intelligently he must defend every fundamental principle of good government. From the experience of other countries and with inexorable logic he must prick every bubble and expose every fallacy, and with Spartan courage assert the sovereignty of reason and experience.

#### WILL BROADEN CONCEPTIONS.

May we look for such illustrations of public duty from the educated men of Ontario? I should hope so. And no matter how soon they are given they will not be premature.

(4) The State has also a right to expect her educated men to broaden the conceptions of citizenship.

Although constitutionally we claim the right to govern half a continent, nationally we are dominated by Provincial ideas. For instance, in framing the Cabinet for the Dominion each Province must, if possible, be represented, and so powerful is this idea that it must be represented in certain proportions. It is not enough that Provincial interests are guarded by proportionate representation in the Senate and the House of Commons. They must be guarded in the Cabinet also. And more than this: The two races—French and English—must be represented in certain proportions, and also the Protestant and Roman Catholic religions. Our conceptions of Canadian citizenship are thus practically “cribbed, cabined and confined” in a threefold sense, Provincially, racially and religiously. The same is true of our Provincial Governments. Their members must be geographically distributed. They must not be all Protestant or all Catholic. Even the Protestant portion must not be all of one denomination, nor of one occupation. There must not be too many lawyers, and so on. As if race, religion, or occupation, were an indispensable qualification for fixing the jurisdiction of our courts, or the location of colonization roads, or for pronouncing upon the utility of the act respecting ditches and watercourses.

Again, in the choice of representatives how often do we overlook the intrinsic merits of available candidates and place in the field men who are *personae gratae* with some section of the constituency, either municipally, socially or commercially? In this foolish way we restrict our choice, and instead of placing a premium upon ability, instead of looking to the great national interests involved, we allow local interests, sometimes of the most insignificant character, to dominate

our actions. It may be true that in spite of all these drawbacks Canada is tolerably well governed. Still, I think I am justified in pleading for larger conceptions of citizenship than the facts just stated indicate. What if Canada is a new country? What if we are only freshmen in our knowledge and experience of Parliamentary government? That is no reason why we should not look forward to the time, not far distant I hope, when the freshmen will have graduated as statesmen, and when the interests of the country will, by their very magnitude, absorb all other distinctions of race, or creed, or occupation.

(5) Higher education should also make us more homogeneous. On the peristyle at the entrance to the World's Fair, at Chicago, these words were inscribed, "Religious toleration, the best fruit of the last four centuries." No doubt of it, and yet in this northern climate I fear that fruit has not fully ripened yet. What heartburnings still exist because we keep alive with all but devilish intensity the hatreds of the past centuries. How quickly we hurl at each other anathemas if perchance we differ as to how frail sinful mortality should prostrate itself before its Maker. With what scorn we look upon the prostrate publican because we prefer to worship in a different attitude. How frenzied we become when some person, in his misguided zeal for his own cause, threatens us with pains and penalties which we know he is unable to inflict. Judging from my own experience I am bound to say that the churches of Canada are among its greatest political forces. I am also of the opinion that in the main their influence, even politically, has been beneficial. I do not say that denominationalism is unselfish. Far from it. Churches are human. They love power; they are often partisan; they do not object to the shelter of the throne, and usually prefer the right hand side to the left. But apart from these considerations, they are the strongholds of public morality, and if in matters of national concern they would divest themselves of their isopolitan character they would render greater service to the State. This, too, is a matter of education. When we learn to regard citizenship as the realization of all that is best in character, no matter how compounded, we will attach less importance to the casket and more to the jewel which it contains.

#### NATIONAL MOVEMENTS.

(6) And, lastly, we have a right to look to our schools and Universities for leadership in every great movement of national utility.

Tennyson accounts for the greatness of Her Majesty as a Sovereign by saying :

“ And statesmen at her councils met  
Who knew the season when to take  
Occasion by the hand, and make  
The bounds of freedom wider yet  
By shaping some august decree,  
Which kept her throne unshaken still,  
Broad-based upon her people’s will,  
And compassed by the inviolate sea.”

A few of such statesmen would be acceptable even in such a progressive country as Canada. How are we to produce them if not by means of the ordinary methods of training and culture applied to the production of great scholars, great lawyers and great doctors ? The art of government is not acquired intuitively any more than other arts. It requires a wide knowledge of constitutional history and law, of political economy and jurisprudence, and a profound insight into the motives by which men are influenced as citizens and taxpayers. Setting aside for the time being the moral equation and the personal accomplishments which are an essential prerequisite to statesmanship in its highest exemplification, might we not look forward to the time when our Legislatures will reflect in some degree the learning, the breadth of view and the scholarship which in the past few years have been poured so bountifully into all other spheres of activity ?

While it is not wise to overrate the so-called “ learning of the schools,” neither is it wise to underrate it. Education is a poor substitute for character, for the sterling qualities of manhood and womanhood, for integrity, for patriotic and unselfish devotion to public duty. Alone, it fits neither for citizenship in private life, nor for leadership in public life. But, combined with the qualities I have mentioned, it compels the despot to acknowledge the reign of law, it opens the gateways of freedom to imprisoned thousands, and plants the standard of peace amid the devastated fields of war.

What, then, is the conclusion of the whole matter ? Is it not this : that Canada has a right to demand from her educated men and women better service than she is now receiving from them ? You remember the words penned by Browning in “ Home Thoughts on the Sea,” as he passed Gibraltar :

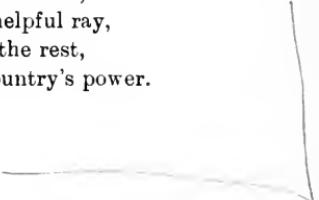
“ Here and there did England help me ;  
how can I help England ? ”

Your country has helped you, has helped us all. Hard-working,

labor-scarred toilers have given of their slender earnings that our Public Schools might be free. With almost equal generosity they have helped you to the very portals of the University, and there, happily, by the forethought of the former founder of Upper Canada, even a University education can be obtained for a nominal consideration. And shall you give nothing in return? Browning's question is most pertinent. Here and there Canada has helped you; how can you help Canada? The obligation is mutual. It is binding at common law. If not discharged, it ought to be. The social circle in which you move should feel the charm of that culture which you have doubtless acquired. The profession which you have chosen should reflect the dignity of your Alma Mater. The country which has nurtured you should be stronger, better and more progressive because of the bounty bestowed upon you. Give to her something in return, if it be ever so little, of your moral force and your loyal service.

He serves his country best  
Who lives pure life and doeth righteous deed,  
And walks straight paths, however others stray,  
And leaves his sons as uttermost bequest  
A stainless record which all men may read.  
No drop but serves the slowly-lifting tide,  
No dew but has an errand to some flower,  
No smallest star but sheds some helpful ray,  
And man by man, each giving to the rest,  
Makes the firm bulwark of the country's power.

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## COLLEGE AND HIGH SCHOOL DEPARTMENT.

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*WHY BOYS LEAVE THE FARM: A DEFENCE OF HIGH SCHOOLS.*

H. I. STRANG, B.A.

The most careless reader of the newspapers can hardly have failed to notice that within the last few years there has been a disposition in certain quarters to find fault with our High Schools, and that of late the attacks have been growing bolder and more numerous. It may be well, then, for us to take a little time to consider whether there is any valid foundation for these attacks. If so, it is for us to say whether we can suggest any means of remedying the defects, if such there are, in the system; if not, whether we should not endeavor in some way to repel the charges, lest being oft repeated they come to be generally believed, and serious injury be done to the cause of secondary education in our Province. I thought, therefore, more especially as one of the most active and outspoken critics is a gentleman of my own town—I refer to Mr. Ernest Heaton, whose contributions to the press on this subject most of you have no doubt noticed—and as the *Canadian Magazine* has seen fit to join editorially in the outcry, that I should be justified in drawing your attention to the matter, leaving it to you to give it further consideration if you think fit.

That a gentleman like Mr. Heaton, of English birth and education, should have brought with him and should still retain some notions that are hardly in sympathy with the more democratic ideas that happily prevail in Ontario, is not to be wondered at; nor is it strange that from want of practical acquaintance with the details and the working of our educational system he should fall into serious errors of fact, and should draw some hasty and illogical inferences. That the editor of the *Canadian Magazine*, however, born and brought up in the Province, a graduate of one of our Collegiate Institutes and also of our Provincial University, should indulge in such foolish and exaggerated statements regarding, not merely the High Schools, but

the High School teachers, as are to be found in the January number, was to me, as I have no doubt to many of you, a matter of equal surprise and regret.

What then are the charges most frequently made? In brief they seem to be these:

(1) That the High Schools are drawing away boys from the farm, the bench, and the shop, and making them discontented and unwilling to remain in what some of our critics are pleased to call, "their proper stations in life."

(2) That they are filling our towns and cities with starving professional men, lawyers, doctors, teachers, civil engineers, etc.

(3) That they are driving hundreds, if not thousands, of the brightest and best of our youth across into the States because the latter, having been educated beyond their proper callings, cannot find employment at home in those which they wish to follow.

Back of these, however, there evidently lies another grievance, one which is not always openly avowed, but which has, I suspect, had much to do with the present outcry. Why, it is asked, should a man be compelled to pay for the support of a system of higher education from which he does not feel that he derives any direct personal benefit?

Before dealing with the charges let me say a few words with regard to the sources from which they come. It has been sought to make it appear that there is a widespread dissatisfaction with our High School System; that there is a very general belief, among the farming community, in particular, that the High Schools are costly and comparatively useless institutions; that all that the great body of the people need or wish is good Public Schools, and that, therefore, higher education may be left to be taken care of by those who wish it and are willing to pay for it, with the addition, perhaps, of a few specially promising poor boys, whose education it may pay the State to provide for by a system of scholarships. For my part, I feel rather sceptical on this point. From all that I have seen and heard I am inclined to believe that the clamor has come oftener from professional men than from farmers or mechanics, and that if the truth were known the impelling motive in most cases has been not so much a genuine regard for the welfare of the farmer or the good of the country, as a wish to narrow the entrance to the professions, and practically to keep them as a preserve for a favored few. During the quarter of a century that I have held my present position I have had, more or less directly, under my charge hundreds of farmers' boys and girls. I have known

and talked to the parents of many of these, and while the great majority of these boys and girls did not return to the farms I cannot recall an instance in which the parents blamed the school or the teachers for the fact. On the other hand, I can, and do recall with gratitude, the kind way in which many of them have spoken of what the school had done for their children in helping to give them a start in life. Further, I have noticed that the persons who have been most ready to grumble at the cost of the school have been those who were least fitted to judge of the value of the education it afforded, viz: those who had never had any children attending it, or whose children had long since grown up, and that the school has always numbered amongst its best supporters parents representing agricultural, mercantile, and mechanical callings. Certainly, if the farmers as a class are opposed to the High Schools, it must be admitted that they nevertheless take full advantage of them, for of the 24,662 pupils attending the High Schools and Collegiate Institutes in 1895, nearly one-third were the children of parents connected with agriculture.

To hear the persistent cry about boys leaving the farm and crowding into the cities and towns one would imagine that such a movement is peculiar to this Province and this generation. Indeed, a stranger might be led to suppose that there are farms by the dozen in different parts of the Province lying unoccupied for want of young men to work them, and that it is only the professions that are overcrowded. The sapient editor of the *Canadian Magazine* actually seems to think that more merchants are needed, for he talks about our taking boys away from the counter, and claims as an advantage of a change he proposes that among other things it would give us more merchants. Is there no overcrowding and driving to the wall and to dishonest practices in the mercantile and industrial world as well as in the professional? Are there no towns in Ontario where the competition between the merchants, the tradesmen, and the mechanics is just as keen as that between the lawyers and the doctors, and are the High Schools to be held responsible for this overcrowding also?

We are charged with "drawing boys away from their legitimate callings." Who, I ask, as he looks through the ranks of the prominent men of the Dominion to-day, whether politicians, officials, professional men, or business men, and thinks of others who have passed away leaving cherished memories, will undertake to say what is a Canadian boy's legitimate calling or proper station in life? Are we to infer that our critics think the time has come when the professions and positions that are commonly looked on by young men as prizes to be striven

for should be kept for the sons of the wealthy and leisure classes who can afford to send them to distant and expensive schools like Upper Canada College ? Are the children of farmers and parents belonging to the industrial classes henceforth to be content with a Public School education, except in a few special cases, where poor boys of more than usual promise are to be selected by examination, and enabled by scholarships to attend these Upper Class Schools ? I have no wish to misrepresent anyone, but to me it seems plain that this is a fair inference from Mr. Heaton's articles. If so, it is hardly worth while discussing the matter, for such a policy when rightly understood, will, I am confident, find little support in Ontario constituencies. I have no objection to scholarships in themselves, but apart from the fact that experience has shown that examinations are by no means a sure test by which to select the boys that are most likely to repay the cost of their education, there is a stronger objection, that such a system would grant as a favor to a few what we in Ontario have been accustomed to regard as the right of all, viz: the opportunity to obtain a good secondary education near home, and at a moderate cost.

Again we are charged with driving boys to the United States. Now no one knows better than I that many of our brightest boys do find their way to the United States, for there are literally scores of our Goderich ex-pupils settled, and, as a rule, doing well, in various parts of the Union, but chiefly in the Western States. Among these are lawyers, doctors, preachers and teachers, but while the difficulty of finding employment in Ontario may in some cases have influenced their course, I know that much more frequently the easier examinations, the shorter and less expensive professional courses, the wider field and the better pay were the impelling motives, and surely these are causes beyond the influence of our High Schools. Moreover, in the list of ex-pupils referred to are to be found farmers, clerks, book-keepers, and representatives of various mechanical and industrial pursuits. Then what about the laborers and sailors that for lack of employment crossed the line, or the farmers that were tempted to move to Kansas and Dakota ? Why should the High Schools be blamed in the one case more than in the other ? Situated and circumstanced as Ontario is with reference to the United States, is anything more natural than that just as England has steadily drawn from Scotland, so the wider field and greater wealth of the Union should always have a tendency to draw numbers of our ambitious and restless youth within its borders. If even the National Policy could not prevent this natural and inevitable result, why should the

High Schools be blamed? Surely it is no part of their function to find employment as well as to furnish education. Let us rather while regretting the loss of these young people, find consolation, and even matter for pride, in the fact that they, as a rule, do credit to their country, and that in the opinion of those who are well qualified to judge their success is largely due to the better education and home training they received in Ontario.

It is as absurd as it is unfair to ignore the changed industrial and social conditions of modern life, and to hold the High Schools responsible for the crowding from the country into towns and cities and into professional and mercantile life. Hundreds of boys leave the farms every year simply because there is neither room nor work for them at home, and because under present conditions it is much cheaper and easier for their fathers to help them to make a start in some other occupation than to place them on farms of their own. That in addition to these, many farmers' boys do get a dislike for farm life, and that this, coupled with the stir, variety, and seeming advantages of town and city life, impels them to leave home and seek fortune with the throng is perfectly true. For this dislike, however, the farmers have themselves largely to blame. Is it strange that boys who have had their desire for knowledge quickened and an interest in the world of to-day awakened in them at school, should find it dull and dreary in a house where there are neither books, magazines, nor papers, except perhaps a weekly county paper? Is it any wonder that boys who are kept at work from morning to night and from Monday to Saturday, who are scarcely allowed to earn or own anything, who hear their fathers constantly grumbling about hard times and protesting that farming does not pay, do not regard farm life, either actual or prospective, with satisfaction? Need we be surprised if these boys, seeing and hearing farmers held up to ridicule as "hayseeds" and "waybacks," and themselves too often treated as the social inferiors of the city and town youth, encouraged, moreover, by the success of other farmers' sons whom they hear spoken of as rising barristers and prominent physicians, should decide to leave the farm and enter a profession.

Let the farmers respect themselves and their calling. Let them show that farming can be made to pay, and that farm life is not incompatible with education and culture, and is not a barrier to political and social advancement, and there will be no lack of boys willing to stay on the farm. In short, what our farmers need is not less but more education, not merely technical education to enable them

to treat farming as a scientific pursuit, but a broader and better general education, which will give them a taste for books and reading, which will leave them less at the mercy of glib-tongued agents and political charlatans, and will enable them to fill with credit any position to which they may be chosen, from school trustee to Minister of Agriculture.

Meanwhile, if our High Schools are not what they should be, let us try to improve them, not, however, by adding to an already overburdened programme a smattering of technical subjects which can be dealt with satisfactorily only in separate institutions, but rather by insisting on a more thorough knowledge of the essentials, and, above all, on a readier and more accurate command by all our students of good English in both speaking and writing.

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*SOME OXFORD TYPES.*

PROFESSOR MAURICE HUTTON.

I preface these few words I have to say of some Oxford types, as I have known them, by the warning that I am not pretending, or intending, to describe the Oxford of to-day, though not a score of years have yet elapsed ; or any other Oxford, except the Oxford of some twenty years ago. There were, I think, roughly speaking, three main currents of thought in those days converging to form the river of University life.

There was first and foremost, the school which had resisted and reacted from the so-called famous Oxford movement, and the teaching of Newman ; the school which had outlived the Oxford movement, and more than any other single school, dominated Oxford ; the rationalist school, of which the best known names were Jowett, the Master of Balliol, and Pattison, Rector of Lincoln ; often the name of Mr. T. H. Green is added, though he was perhaps too many-sided, too actively beneficent, too practically devout, to be in entire sympathy with its negative dialectic, and sterile criticism. Not, of course, that the ordinary undergraduate saw much, if anything, of these great names. Jowett and Pattison were elderly men, and the latter in particular had withdrawn in a great measure from the work of teaching ; but it was their influence which had moulded most of the men he did see. Besides, if he did not see much of them, he heard a great deal ; he knew all that there was to know about them, and a great deal more ; more even than the angels knew ; that is, not only more than the bald historic facts, but more also than the unrecorded facts or even than that illuminating fiction, which is often spiritually and ideally truer than fact ; for there had gathered a vast accretion of legends round the name of each, many of them neither literally nor spiritually true. Than the rapid growth of such myths, nothing is more curious or interesting, unless it be the antiquity of some of them, which yet purport to be historical accounts of quite recent events and persons. Jowett, himself, on one occasion, asked a friend for the anecdotes told of him, and after listening quietly to a long list, "All of those," he remarked, "were told by me and my contemporaries of my predecessor, except one, and that is not true of me." However—as Herodotus would say—I am not bound to believe all the legends I heard in Oxford, I *am* bound to record them.

Of Pattison, then, it was told that he never spoke to undergraduates unless they showed marked ability, but he made one exception, in favor of anglers. With an undergraduate of either of these types he would walk and talk of philosophy or of fish ; but even with them he was austere. One of them more ambitious than the rest and determined not to sink below the level of the occasion and the Rector, began the conversation one day, the moment they issued through the college gate-way, with the sufficiently abstruse remark : "The irony of Sophocles, Dr. Pattison, is finer than the irony of Euripides." "Quote," was the dry retort, but quotation came there none, only in its place a silent walk. A weaker mind when engaged in the hazardous joy of a walk with Jowett—says another legend—lost its self-possession in presence of his silence, and exchanged silence for vacuous speech : "It is a fine day, Master," stammered ingenuous youth ; for answer came a reproachful look ; but no further speech on either side to enliven or belie the peaceful prospect of Nature, till as they reached the College gate again after the student's constitutional was finished, came a parting echo of the unhappy overture : "That was a foolish remark you made." Nor did the voluble and self-possessed orator always fare better. One such there was who talked, and talked, and talked, only to reap at the walk's conclusion the chequered verdict "That will do, but too much conceit." Yet another had the bad taste and the bad judgment to suppose that the Master would welcome cheap second-hand agnosticism, and he finished a lively discourse in the style of Col. Ingersoll, to find his companion gently humming "Rock of Ages cleft for me." This was indeed one of the most interesting and charming features of Jowett's character, that he never paraded religious difficulties, or talked of them except in sincerity to persons who could appreciate and understand. He never gratified the sensation-loving superficial public by oratorical fireworks of this kind. The fashionable world flocked in from London and the provinces on a summer Sunday into Oxford, and packed the University Church, all agog to hear and to tell some new heresy. Then would the Master in his piping voice pronounce a mild eulogy upon friendship, or read an essay on the lost art of conversation. His contempt for affected and precocious infidelity showed itself again on another occasion when some flippant youth reported that he could not satisfy himself of the existence of Deity. "You will satisfy yourself by ten o'clock to-morrow morning, sir, or leave College," was the unsympathetic answer. A deeper answer was granted to well-meaning irreverence of a different type. "Master," said a converted pupil, "I have found

the Saviour." "Then don't tell anybody," was the quiet rebuke. Another anecdote, not less characteristic of this side of his mind—the theological side—was told of an occasion during my own term in Oxford: A student of the College went to ask him for the use of the College Hall for a meeting to promote missions to the Hindoos. "Certainly," said the Master, and added to his visitor's alarm, "I will take the chair myself," which he did with an opening address, delightfully frank and typical. "A missionary's career," he said, "appears to me a singularly attractive one: it gives to a man so admirable an opportunity of studying the picturesque religions of the East." It was this open-mindedness to religious systems other than Christian which formed the basis for another anecdote by no means so authentic, according to which a distinguished Hindoo—a convert of the missionaries—after hearing the Master preach, announced himself re-converted to Buddhism.

Jowett was much more of a man of the world than Pattison, and aimed far more at completeness of life and interest. He was not so intolerant of small things. "I must apologize, Master," said a youthful philosopher, who had been deputed, very much against his will, to approach, or reproach, the Master concerning the quality of the potatoes served by the college cook, "I must apologize for distracting your attention to such trifles." "Don't apologize," was the unexpected answer of the philosopher more mature, "life is made up of trifles;" and so on another occasion he astonished a particularly laborious and hard reading student, who sat with straining ears expecting some aphorism on Plato, with the eminently practical and worldly advice, "Be young, my young friend, be young." Again the sceptic's apprehensiveness which has played so large a part in the lives of scholars, and sometimes—in reference to marriage and its perturbing risks—a part so tragic, was, if another anecdote be true, unnecessarily keen in even Jowett's mind on one occasion. "Dr. Jowett," said a young lady to whom he had shown great kindness, and who was encouraged thereby to hope that he would grace her approaching marriage, "Dr. Jowett I have a great favor to ask of you; will you marry me?" "Perhaps we should not be happy," was his hasty and irrelevant ejaculation.

He was a great friend of George Eliot, and she too in a pessimistic spirit was accustomed whenever she heard of an approaching marriage in her circle to say softly, "Yes, he is very good, and she is very good, but will they suit?"

I have left myself little time for notice of other schools of thought, but other schools of thought there were. Only second in

influence to this Rationalist and Classical School was a Theological School : the School of Oxford High Churchmen, the School of which Dean Church, and Canon Liddon, and Canon King were the leaders, the two latter living largely in Oxford. The School included churchmen of every degree of Anglicanism and Ritualism ; it covered also—therein lay its strength—not merely the moral fervor and Apostolic devotion, which has gathered hundreds of men and women in the squalid slums of great English cities, into Anglican or Ritualist Churches, but also almost invariably a breadth of view and a liberality of thought which had once been associated only with the names of Dean Stanley and the Broad Church. Nor was this the only point of contact between the High and Broad Churches, there was a second : they both loved moderation and sweet reasonableness, and they both disliked ostentation and the slightest approach to advertisement or publicity. This is where even Cardinal Newman fell short of the ideal of these Anglicans ; he was too fanatic and extravagant, (especially in his “Loss and Gain”), I had almost said ribald. They believed emphatically in the trivial round and the common task ; they disliked intensely all sensational and dramatic changes ; their real type was Isaac Williams, the unknown self-obliterating country Rector, or John Keble, rather than Newman, still more than Ward, the most extravagant and whimsical and self-opinionated of men. In short, all the arbitrary and high handed action which attracts the world offended these men of the student type, just as other worldly considerations offended other students. The spirit which moved Keble, in fact, was the same spirit at bottom as that which—in another department of thought—marked Henry Smith, the Oxford mathematician, a most singularly accomplished man of Jowett’s generation. In addition to his extraordinary breadth of interest, he made some discoveries not inconsiderable, I believe, in mathematics, but his especial satisfaction in them was this that there was not a farthing to be made out of them by hook or by crook ; they belonged just where they professed to belong, to pure mathematics ; they were golden, but not with the gold of this world ; rust and exposure could not tarnish *them*, thieves would never care to break through nor steal.

But to return to the High Churchmen, the men whose names are now well known in the Church, Holland, and Gore, and Jayne, and many others belonged to this School. Its influence has spread not over England only, but to this Continent, perhaps especially the influence of the highest of its High Churchmen, Canon, now Bishop, King,

who exercised in Oxford then, as he has exercised since over a wider field, a marvelous personal charm, whom but to see was a religious education. If the Dean of St. Paul's was at that time the brain of the School, and Canon Liddon its eloquent tongue, Canon King was already becoming its heart and soul.

And last and perhaps in point of number least, there was in Oxford a remnant of the old evangelicals, fallen on evil days and with a scanty following, with their principal stronghold of old, the most beautiful college in Oxford—Wadham College—wrested from them by an upstart handful of Positivists, who, of course, ran the college down to the ground, whence it is only now painfully uprising. There were never, by the way, more than thirty Positivists I suppose in England, all told, and they have had three disruptions I am informed, and are now divided into four churches, three that is besides the original church (the church of the Marrow, let us call it.) At their worship it is understood they solemnly commemorate “Space:” a euphemism, I conjecture, for the solitude which they wrought in the quadrangles of Wadham, and in those gardens where for long years after the cedars of Lebanon wasted their sweetness on the desert air.

And yet the old evangelical school—as I at least am especially bound to remember—still had their saints in Oxford. In Dean Burgon’s book “The Lives of Ten Good Men,” one of the first lives is the life of Richard Lynch Cotton, Provost of Worcester college. If the other nine men were, all taken together, as good as Dr. Cotton, the world was not worthy of them. For the Provost of Worcester was an adorable old man; he used to tell us how Dean Burgon once stooped down and kissed him on the top of his head. I do not think we were merely amused to hear it; he was a very little man and Dean Burgon was very tall, but in fact the feat was easy for moral as well as physical reasons. Apropos, however, of his smallness of stature, by the way, Mr. Goldwin Smith has told me that his keenest recollection of the Provost was on the occasion of the Prince of Wales taking his degree. There was a great function and the Provost—as it so happened—was Vice-Chancellor that year. Mr. Smith beheld him in his scarlet robes standing in the Natural History Museum between the front legs of the giraffe.

He was a man of the most unaffected and simple piety it has ever been my good fortune to meet; so pleasant is the memory of it that I should be sorry now to see his pre-eminence challenged by younger men. It may be there is no fear of that. With the newly elected scholar, fresh, perhaps, from a small country grammar school and

country rectory, green, and young and hopeful, launched upon the world like a lamb among wolves, he would begin the academic life with a few words of private prayer between them two only, or at least I mean between them two and One Other, whom, as Herodotus would say, it is not lawful for me to mention ; such prayer rose naturally to his lips and therefore fell naturally upon his hearers' ears. From this first introduction to him to the end of one's course he left the same impression on one's mind, that of one who never neglected his college duties as he conceived them, but was as faithful a Provost as any in Oxford. Foremost among these duties in his opinion was to send for any one whose attendance at chapel left something to be desired. If on these occasions one chose to go to him in the morning hours one would find him studying the Bible, generally, I think, the Old Testament. Elaborate but futile endeavors were made to calculate the number of verses which he covered in a morning's reading. In the afternoon, on the other hand, he seemed usually to relax his mind with Davison on Prophecy ; he gave me a copy of the book, and thereby hangs another tale. He had once printed a volume of sermons in his younger days; they had not been financially a success, in point of fact the edition was left on his hands. Ultimately he disposed of them by presenting one copy as a gift to each freshman as he entered the college. When the edition was exhausted he did not like to withdraw from the precedent established and he was too modest to print a new edition and Davison succeeded to the vacant place. I wish I had been before the days of Davison ; I would rather have had his own sermons; they would have recalled more vividly the familiar scene of the college chapel, with the white-haired old man sitting in the corner, holding a lighted candlestick askew upon his knee, to follow better the reading of the lessons for the day, and dropping wax over his white surplice ; or again, on a warm summer Sunday afternoon preaching to a recumbent and somnolent audience discourses, whose toothless utterance prevented a large part thereof from reaching our ears, though ever and again one would catch the name of Aristotle recurring between those of the Apostles.

Nor was he less careful of lighter and less solemn duties. He asked us all to breakfast every year, ten or twelve at a time. At these same breakfasts he retailed personal anecdotes manfully, often under great difficulties, often across the coffee pot and the whole length of the table to the senior man at the other end, when the freshmen near him, as happened not unfrequently, kept silence even from good words. His anecdotes were entertaining but he was not a man of varied

accomplishments ; his ideas of music in particular were elementary and his own. One of us died in my time, and we had a funeral service in the college chapel and the Dead March in Saul was played ; as we emerged said the Provost to the Vice-Provost, "What an inspiriting air." He had the most pathetic and the most sincere belief in the efficacy of these chapel exercises. "Stupendous" he once said to me (it was one of his favorite epithets) "stupendous is it not, the influence of chapel. I always know what a man's character is when I look at his chapel list. Most remarkable : (another favorite epithet). Do you know I received yesterday a request for a testimonial from a man I had not seen for thirty years. I could not remember his face or anything about him, but I turned to his chapel list and found he had been a regular attendant, so I sent him, with full confidence, a hearty testimonial ; most excellent young man." On another occasion I recollect he sent for an athlete, a very worthy fellow, fonder of running the secular races set before him than the apostolic race to chapel, as the Provost conceived it. "I don't see, Mr. Provost," grumbled this young gentleman, "the use of all these chapels." "Oh, Mr. Holt, Mr. Holt!" said the Provost, grieved beyond expression, "How can you say so, Mr. Holt? What will you do in heaven, Mr. Holt? It is one endless chapel there."

Naturally his belief in the goal at the other end was not less uncompromisingly literal. It is reported that on one occasion, having an offender before him he solemnly lighted a candle and held the offender's finger for an instant in the flame, with the laconic appeal "It will be worse than that." The younger Dons loved to draw him out about Dean Stanley. He was perfectly polite to them but very non-committal. "Yes," he said on one occasion, "there was much I liked about his sermon ; he quoted very many beautiful texts."

So then to revert in conclusion for a moment to the two types of men of whom I have said most, in the one case because they were most influential, in the other because I happened to see most of them, there were in the Oxford of those days, so far as my college was concerned, the three men and the two types (if we may regard the Master and Rector as varieties of the same type), the Master, the Rector, and the Provost ; the Humanist, the Sceptic, and the Pietist ; the Man of the World, the Cynic, and the Saint : Wisdom, Learning, and Religion ; and the most eminent of these was the first, the Master of Balliol ; the most characteristic of his times was the second, the Rector of Lincoln ; while the third, obscure and without special gifts, toiled patiently after the Christianity which his system of thought set before him as his goal.

Each filled his place and realized—as far as a man does—his type. The first two were names throughout the land, echoing—shall we say? as a sounding brass or a tinkling cymbal. But the third enjoyed at least this compensation that he was enabled both by his temperament and by his school of thought to retain through all the depressing disillusionments of life, a larger measure of those very elementary and yet invincible graces, which seemed to ebb away or flicker out of the lives of his more gifted colleagues, the three graces of the Christian Dispensation; and, therefore, because the weak things of the world, as we know, are apt to confound the mighty, and revelations have been made to babes which are denied to the wise and prudent, I doubt whether after all the Provost was not the best beloved and the most missed in his college, and whether after all it is not his acquaintance which his college looks forward with the liveliest interest to renewing in another world; if ever, that is to say, they are tempted to hope, that even for the least of his disciples, and those who are not worthy even to be called his disciples, his prayers and his piety, may furnish a passport to that “endless chapel” of the Heavenly Jerusalem, upon which his imagination loved to dwell.

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## MODERN LANGUAGE ASSOCIATION.

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*JOSEPH VON EICHENDORFF*

MISS H. ALBARUS, B.A., TORONTO.

ist einer der spaeteren Romantiker, d. h. er gehoert der Romantischen Schule zu einer Zeit an, wo dieselbe fast schon in der Aufloesung begriffen ist. Um die Werke dieses Dichters besser zu verstehen, ist es notwendig, auf den Ursprung und das Wesen der Romantik naeher einzugehen.

Die Wurzel der Romantischen Poesie ist in der Philosophie zu suchen, denn, ohne Fichte und Schelling haetten wir nicht die Dichter Tieck, Novalis, Achim von Arnim, Brentano und die Gebrueder Schlegel gehabt.

Wir wollen nun mit kurzen Worten auf die groszen philosophischen Systeme eingehen, welche auf die empfaenglichen Gemueter der Romantischen Dichter solchen bedeutenden Einflusz ausgeuebt haben.

Kant hatte am Anfange des Jahrhunderts gelehrt, dasz wir eine absolute Erkenntnisz der Dinge in dieser Welt nicht haben koennten, da die Gegenstaende der Auszenwelt nicht ein unmittelbares Abbild, wie etwa eine Photographie in dem Gehirn hervorrufen; sondern, dasz die Dinge, welche uns umgeben, nur einen Reiz auf unsere Sinnesorgane ausueben, welcher, nach dem Gehirn fortgepflanzt, hier die Veranlassung zu einer bestimmten Empfindung wird. Dasz uns z. B. das Gras gruen erscheint, beweist nicht, dasz dasselbe wirklich so ist, sondern nur, dasz dieser Gegenstand eine gewisse Anzahl von Aether-Schwingungen macht, welche, durch den optischen Nerv nach dem Gehirn uebertragen, dort die Empfindung der gruenen Farbe hervorrufen.

Also in kurzen Worten: Kant lehrte, dasz wir nie erkennen koennten, wie die Dinge dieser Welt *sind*, sondern nur, wie sie uns *erscheinen*.

Der Philosoph Fichte zog nun die Sehluszfolgerung dieser Lehre des groszen Kant, er sagte naemlich: "Wenn wir das innere Wesen der Gegenstaende des Weltalls nicht erkennen koennen, so existiert

dasselbe fuer uns nicht; das Einzige, was allein Wichtigkeit fuer uns hat, sind unsere geistigen Zustaende, durch welche wir Erkenntniss der Auszenwelt erlangen."

Da die Empfindungen und Gedanken, welche die Dinge der Welt in uns erregen, aber ein Teil unseres eigensten inneren Wesens sind, also unser "Ich" bilden helfen, daher erklaerte Fichte die Betrachtung unserer Persoenlichkeit, unsers Ichs fur den wuerdigsten Gegenstand unseres Studiums, weil wir nur auf diese Weise zur Erkenntniss der Dinge kommen koennten.

Schelling, der grosze Zeitgenosse Fichtes, sah jedoch den Mangel in dem Systeme des Letzteren sowohl wie in der Kant'schen Philosophie, da beide die objective Natur nicht in befriedigender Weise erklaeren konnten.

So schrieb er denn die glaenzende Antithese an den Eingang seines neuen Systems: "Die Natur soll der sichtbare Geist, der Geist die unsichtbare Natur sein."

Und lehrte, dasz *die Weltseele* den Kern des ganzen Weltalls bilde. Diese Weltseele ist aber auch in jedem Individuum vorhanden und hilft uns die Dinge der Auszenwelt erkennen, indem der Teil der Weltseele in *uns* mit der Seele in der uns umgebenden Natur communiziert.

Die Dichter der Romantischen Schule waren Maenner, welche auf den Universitaeten die Lehren der groszen Philosophen begierig in sich aufgenommen und sie auf ihr Leben, ihre Anschauungsweise und Dichtungen einen bedeutenden Einflusz hatten ausueben lassen.

Welches sind nun die characteristischen Merkmale der Romantischen Dichtung, und wie sind dieselben aus der Philosophie herzuleiten?

Dem einigermaszen aufmerksamen Beobachter kann es nicht entgehen, dasz in der Poesie dieser Gattung das Wunderbare, das Mystische, das Phantastische und Regellose vorherrscht.

" Mondbeglaenzte Zauber Nacht,  
Die den Sinn gefangen haelt ;  
Wunderbare Maerchenwelt,  
Steig auf in der alten Pracht ! "

Diese Verse, von echt romantischem Hauche durchweht, koennte man als Motto den Werken eines Tieck, Schlegel, Novalis, etc vorsetzen, denn dieselben fuehren uns in eine Welt, die von der, in welcher wir leben, sehr verschieden ist. Sie fuehren uns oft in die farbenpraechtige Welt des Mittelalters mit seinen Kaempfen und Liebesabenteuern, seiner Mystik und seinem Wunderglauben.

Sie fuehren uns in das Reich der Sage und des Maerchens,

“ Wo Brunnen leise rauschen  
Und Wunderblumen blueh'n,  
Wo Marmorbilder lauschen  
Hervor aus dunklem Gruen.”

Der Romantische Dichter haelt es nicht fuer noetig, die Natur und das Menschenleben scharf zu beobachten und dann das Ergebnis dieser Beobachtungen in poetischer Form uns zur Anschauung zu bringen ; da nach Fichte die Auszenwelt nicht existiert, so steigt der Romantiker einfach in die Tiefen seines “ Ichs ” hinab und laeszt seiner schoepferischen Phantasie freien Lauf. Er sieht nicht die Auszenwelt direct an, sondern blickt immer bei seinem Schaffen wie Tennyson's “ Lady of Shalott ” in einen Spiegel, den Spiegel seiner Einbildungskraft, in welchem manchmal die Figuren verzerrt erscheinen.

Aus diesem Hang der Romantiker, die Phantasie als Quelle der Wahrheit zu betrachten, geht denn auch ihre Vorliebe fuer mittelalterliche, maerchen und sagenhafte Stoffe hervor, weil diese die Phantasie in besonders hohem Grade anregen.

Eine andere Eigenthuemlichkeit der Romantiker ist, dasz sie die Natur oft so darstellen, als ob sie mit den Gefuehlen ihrer Helden sympathisierte. Wir finden dieses z. B. in folgender Stelle des “ Taugenichts : ”

“ Die Sonne ging eben unter und bedeckte das ganze Land mit Glanz und Schimmer ; die Donan schlaen gelte sich praechtig wie von lauter Gold und Feuer in die weite Ferne, von allen Bergen bis tief in das Land hinein sangen und jauchzten die Winzer. Ich sasz mit dem Portier auf dem Baenkechen vor dem Hause und freute mich in der lauen Luft, wie der lustige Tag so langsam vor uns verdunkelte und verhallte. Da lieszen sich auf einmal die Hoerner der zurueckkehrenden Jaeger von Ferne vernehmen, die von den Bergen gegenueber einander lieblich von Zeit zu Zeit Antwort gaben. Ich war recht im innersten Herzen vergnuegt und sprang auf und rief wie bezaubert und entzueckt vor Lust: “ Nein, das ist mir doch ein Metier die edle Jaegerei ! ”

Die Natur ist hier mit der Stimmung des Helden vollstaendig im Einklang ; die Weltseele, welche sich im Glanz und Schimmer der Abendsonne sowohl wie in den melodischen Klaengen der Waldhoerner offenbart, spricht deutlich zue der Seele des Menschen. Wir haben hier den Einflusz der Schelling'schen Philosophie. ——

Obgleich es wohl nur wenige Menschen gibt, die sich dem Zauber

der Romantischen Poesie verschlieszen konnen, so duerfen wir jedoch nicht den Hauptmangel in derselben uebersehen, welcher uns gleichzeitig den Grund liefert, weshalb die Werke der Romantiker nie Unsterblichkeit erlangen werden.

In der Romantischen Dichtung finden wir keinen groszen, edlen, starken Charakter, der die Welt besser macht, in dem er ihr sein Gepraege aufdrueckt. Wir lesen die Werke der Romantiker mit Wohlgefallen, sie sind oft kuenstlerisch in Form, regen unsre Phantasie an, und die in ihnen zum Ausdruck gebrachte Harmonie zwischen der uns umgebenden Natur und unserer Stimmung wirkt wohlthuend auf unser Gemuet. Aber die menschliche Natur kommt nicht in ihrer ganzen Grosze und Hoheit in ihnen zur Anschauung, denn die Charactere werden nicht von Pflicht und Sittengesetz geleitet, sondern folgen einfach ihren Impulsen und ueberlassen sich oft, wie im "Taugeniehts" dem Spiel des Zufalls. Das Wesentliche und Ewig-Menschliche kommt nicht in diesen Figuren zur Erscheinung, sondern nur das Zufaellige. Die Ritter und Edelfraeulein der Romantiker, sind ebenso wie die Wassergeister, Feen und Maerchenprinzessinnen nur schattenhafte Figuren, die sich wie zum Carnival maskiert und verkleidet haben, denn man erkennt ihr eigentliches Wesen nicht, man sieht nur den romantischen Ausputz. Der Grund fuer den Mangel an consequenter Durchfuehrung der Charactere ist nicht schwer zu erraten. Es ist Fichte's "absolutes Ich," das sich gegen Gesetz und Sitte auflehnt.

Dieses "Ich" macht sich selber Gesetze, stoeszt die alte Weltordnung un und schafft sich eine neue.

Fichte selbst ging wohl nie so weit in seinen Lehren, aber die Romantiker zogen die aeuszersten Consequenzen seines Systems, sie verlangten absolute Freiheit fuer die Entwicklung der Individualitaet und lieferten durch ihr zuegelloses Leben zugleich Beispiele zur Erlaeuterung ihrer Dogmen.

Die poetische Verherrlichung des Mittelalters fand jedoch zu wenig Boden in einer Nation, die sich zum Kampfe gegen den fremden Unterdruecker, Napoleon, ruestete. In dieser Zeit entstanden auch noche Werke, welche den Charakter der Romantischen Poesie tragen, nicht jedoch, weil das Mittelalter in ihnen verherrlicht ist, denn das ist nicht mehr der Fall, sondern, weil das romantische Prinzip der formverachtenden Genialitat und der phantastischen Willkuehr in ihnen herrscht.

Zu den Dichtern dieser Periode der Romantik gehoert Eichendorff.

Er nimmt seine Stoffe aus der modernen Zeit, behandelt sie aber in romantischer Weise.

Joseph, Freiherr von Eichendorff wurde im Jahre 1789 auf dem Schlosse Lubowitz in Schlesien geboren.

Seinen ersten Unterricht erhielt er zu Hause von Hauslehrern und wurde dann auf das Gymnasium nach Breslau geschickt. Im Alter von 16 Jahren wurde er auf der Universität Halle als Student der Jurisprudenz immatrikuliert und beendigte seine Studien in Heidelberg. Nachdem Eichendorff einige Jahre auf Reisen gewesen und gerade im Begriff war, in den oestreichischen Staatsdienst einzutreten, erliesz Koenig Friedrich Wilhelm III von Preuszen im Maerz des Jahres 1813 den beruehmten Aufruf "An mein Volk," in welchem er alle waffenfaehigen Maenner zum Kampfe gegen Napoleon aufforderte. Eichendorff leistete diesem Aufruf Folge und wurde bald Offizier in dem beruehmten Luetzow'schen Frei-Corps, das Koerner in seinem begeisteren Liede von "Luetzow's wilder, verwegener Jagd" verherrlicht hat. Eichendorf machte die beiden Freiheitskriege mit, verliesz aber dann die militaerische Laufbahn und widmete sich der Regierungs-Carriere. Sein Beruf führte ihn abwechselnd in die Provinzen Schlesien, Ost-und Westpreuszen, aber die meiste Zeit seines Lebens brachte er in Berlin zu. Er starb auf dem Landgute seines Schwiegersohns in Schlesien im Jahre 1857.

Eichendorff ist eine vorwaltend lyrische Natur; seine Verse zeigen nicht nur die Gemuetstiefe und Innigkeit, welche der Romantischen Schule eigen ist, sondern auch ein feines Gefuehl fur Rhythmus und kuenstlerische Form. Die Natur und das menschliche Gemuet stehen auch bei diesem Dichter in inniger Beziehung; die Gefuehle des Menschenherzens finden ein Echo in Wald und Feld, im Sturm der Schlacht, wie in der Einsamkeit des Muehlengrundes, in traeumerischen Mondnaechten und hellen Fruehlingstagen.

Sein Soldatenlied schlieszt mit folgenden schwungvollen Versen:

" Trompeten nur hoer' ich werben  
So hell durch die Fruehlingsluft ;  
Zur Hochzeit oder zum Sterben  
So uebermaechtig es ruft.  
Das sind meine lieben Reiter,  
Die rufen hinaus zur Schlacht ;  
Das sind meine lustigen Streiter,  
Nun Liebchen, gute Nacht !  
Wie wird es da vorne so heiter,  
Wie spruehet der Morgenwind ;  
In den Sieg, in den Tod und weiter  
Bis dasz wir im Himmel sind."

Andere Gedichte Eichendorffs z. B.

'Wer hat dich, du schoener Wald  
Aufgebaut so hoch da droben ? etc

Und ein anderes :

" O, Thaeler weit, o Hoehen,  
O, schoener gruener Wald,"

sind vollkommen Gemeingut des Volkes geworden, besonders, seit sie von Musikern wie Mendelsohn componiert worden sind.

Eines der schoensten und volkstuemlichsten Gedichte Eichendorffs ist aber :

" In einem kuehlen Grunde  
Da geht ein Muehlenrad ;  
Mein Liebchen ist verschwunden,  
Das dort gewohnet hat."

Sie hat mir Treu versprochen,  
Gab mir'nen Ring dabei ;  
Die Treu hat sie gebrochen  
Das Ringlein sprang entzwei.

Ich moecht 'als Reiter fliegen  
Wohl in die blutge Schlacht ;  
Um stille Feuer liegen  
Im Feld bei dunkler Nacht.

Hoer ich das Muehlrad gehen,  
Ich weisz nicht, was ich will ;  
Ich moecht'am liebsten sterben,  
Dann waer's auf einmal still.

Weniger gluecklich als in seinen Liedern und Gedichten ist Eichendorff in seinen prosaischen Werken. Es kam ihm darauf an, den Klassikern und den andern Romantikern gegenueber einen selbststaendigen Standpunkt zu behaupten, daher steckte er das Panier der wahren Romantik auf, die sich ihm als die glaubenstarke, sittenreine Poesie des Katholizismus offenbarte. Als eifriger Katholik bekaempfte er das alte Heidentum in seinem Romanzen—Cyklus "Julian" und wandte sich kritisch gegen das neue in seinen Schriften :

*"Uber die religioese und ethische Bedeutung der neueren Romanischen Poesie in Deutschland," und "Der neue deutsche Roman des 18 ten Jahrhunderts in seinem Verhaeltnis zum Christenthum."*

Diese Werke zeigen jedoch leider, dass der Verfasser unter dem Einflusse krankhafter Theorieen ist, denen er den gesunden Sinn fuer das Schoene opfert. Eichendorff faszt den Begriff des Christlichen so

eng, dasz nicht nur die deutsche klassische Literatur, sondern der ganze Protestantismus aus ihm herauszufallen droht.

Noch weniger erfolgreich als in seinem Kampfe mit dem Drachen des Heidentums war er in seinem Angriffe auf die revolutionären Prinzipien, welche seine Dichtung „*Robert u. Guiscard*“ enthaelt. Die französische Revolution ist ueberhaupt fuer die romantische Behandlung nicht geeignet; denn die geschichtlichen Zwecke, welche sie verfolgt, waren klar und bestimmt, ihre Hauptgestalten sind so scharf und characteristisch, das fuer die romantische Schattenhaftigkeit der Schilderung wenig Platz bleibt.

Die Motive der Handlung sind ziemlich verbraucht. Zwei feindliche Bruder, der eine Guiscard, ein Anhaenger des Koenigstums, der andere, Robert, ein Anhaenger der Freiheit, kaempfen mit einander, sterben und leben wieder auf im bunten Reich der Traeume. Die Schilderung der romantisch verzauberten Naturlaeszt uns aber niemals zu der Stimmung kommenen, welche mit den wilden Thaten und Begebenheiten harmoniert.

Alles „*traeunit*“ bei Eichendorff; der Wald „*traeumt von der Nacht*,“ der Schmetterling zieht

“ Wie bunte Blueten, die der Wind verwehte,  
Selbst *traeum'risch* ueber die *vertraeumten* Beete.”

Die Rose, die Tulpe, die Lilie erwachen von ihren „*Traeumen*,“ das Schlosz „*traeumt*“ von der vergangenen Pracht, der Fischernachen sogar schaukelt „*traeumerisch*“ zwischen dunklem Ried—bis dem Leser schlieszlich die Augen zufallen und er auch——“ *traeumt*.“

Dasjenige Werk Eichendorffs jedoch, welches fuer die Anwesenden ein besonderes Interesse hat, ist „Aus dem Leben eines Taugenichts.“ Der Held der Erzaehlung ist eine poetische Natur von unendlicher Harmlosigkeit, empfanglich fuer alle Schoenheiten des Lebens, die er mit kindlichem Gemuet erfaszt. In der Figur des Taugenichts hat Eichendorff uns einige Zuege seines eigenen Characters gegeben.

Auch er war eine echte Kuenstlernatur, von einem unwiderstehlichen Wandertriebe beseelt, der ihn oft von seinem Schreibtisch fort in die Ferne, in fremde Laender lockte. Obgleich Eichendorff eine durchaus thaetige Natur war ist es doch nicht unschwer zu sehen, dasz er sich oft im Drang der Geschaefte nach dem sorglosen Leben des kuenstlerischen Muessiggangers sehnte, der, wie der Held unserer Geschichte, bei Sonnenschein und Vogelsang durch die Welt zieht, und, unbekuemmt um seine Zukunft, aus voller Kehle zu seinem Geigenspiele singt.

“ Den lieben Gott lasz ich nur walten,  
 Der Baechlein, Lerchen, Wald und Feld  
 Und Erd’ und Himmel thut erhalten,  
 Hat auch mein Sach’ auf’s Best bestellt ! ”

Der Taugenichts, wie ihn sein Vater genannt hat, geht von Hause fort, um die Welt zu sehen. Er weisz nicht, wohin er geht, er hat keinen Reiseplan und wird von zwei Damen nach Wien auf ein Schlosz mitgonommen, wo er zuerst eine Stelle als Gaertnerbursche und dann als Zoll-Einnehmer erhaelt. Er verliebt sich in die juengere der beiden Damen, die eigentlich die Nichte des Portiers im Schlosse war, aber von der Graefin erzogen worden war und mehr als Tochter behandelt wurde weshalb sie der Taugenichts auch fuer eine Graefin haelt. Da er aus diesem Grunde die Hoffnung aufgiebt, je ihre Liebe gewinnen zu koennen, geht er heimlich aus dem Schlosse fort und will sich nach Italien begeben, “ wo die Pomeranzen wachsen,” ohne jedoch den Weg dahin zu wissen. Der Zufall fuegt es, dasz die Tochter der Graefin, deren Schlosz der Taugenichts eben verlassen hat, sich mit ihrem Geliebten, als Maler verkleidet, auf der Flucht nach Italien befindet, und dem Taugenichts im Walde begegnet. Er musz dem Paar erst den Weg nach dem naechsten Dorfe zeigen und wird dann von ihnen nach Italien mitgenommen. Die verschiedenen Situationen, in welche der Taugenichts auf seinen Reisen geraet, wirken hoechst komisch. Der Zufall hat sein tolles Spiel mit unserem Helden, Eichendorff laeszt in echt romantischer Weise seiner Phantasie freien Lauf. Der Taugenichts wird in Italien per Extrapolst von Ort zu Ort befoerdert; er will aber wissen, wohin es geht, versteht jedoch nicht Italienisch, und der Postillon antwortet auf alle seine Fragen nur mit “ Si, si, Signore.” Endlich haelt der Wagen vor einem alten Schlosse, wo der Taugenichts freundlich aufgenommen und auf das Beste bewirtet wird, weil man ihn —— fuer die entlaufene Graefin in Verkleidung haelt. Die Situation ist so romantisch und unnatuerlich wie moeglich, aber lachen musz man doch.

Wie in allen Werken der Romantiker entbehrft auch in diesem die Handlung der Einheit. Der Held zieht planlos durch die Welt und wird schliesz lich vom Zufall seinem Gluecke zugefuehrt. Die Seene wechselt beständig, ein Abenteuer folgt unmittelbar auf das andere, wie die Bilder in einer Laterna magica. Von einer consequenten Durchfuehrung der Charactere ist natuerlich nicht die Rede, jedoch enthalten einige viel lebenswahre Zuge, wie z. B. die schnippische Kammerjungfer der Grafin, die lustigen Prager Studenten und der joviale geistliche Herr.

Durch die ganze Novelle hat der Dichter wahre Perlen der Lyrik gestreut, wie z. B. die an ein mittelalterliches Minnelied erinnernden Verse :

“ Wohin ich geh ’und schaue  
 In Feld und Wald un Thal,  
 Vom Berg in’s Himmelsblaue,  
 Viel schoene gnaed’ge Fraue,  
 Gruesz ich dich tausendmal ! ”

Oder ein anderes, welches ein Volkslied im wahren Sinne des Wortes geworden ist :

“ Fliegt der erste Morgenstrahl  
 Durch das stille Nebelthal  
 Rauscht erwachend Feld und Huegel ;  
 Wer da fliegen kann nimmt Fluegel !  
  
 Und sein Huetlein in die Luft  
 Wirft der Mensch vor Lust und ruft :  
 Hat Gesang doch auch noch Schwingen,  
 Nun so will ich froehlich singen ! ”

Wenn wir nun die Stellung, welche Eichendorff in der deutschen Literatur einnimmt, noch einmal im Ganzen ueberschauen, so müssen wir sagen, dassz er in seinen Prosa-Werken in die Irrtuemer der Romantiker verfallen ist, aber in seinen Liedern zeigt er sich als ein Dichter von Gottes Gnaden, von welchem auch das Wort Uhlands gilt :

“ Er singet von Lenz und Liebe, von seeliger gold’ner Zeit ;  
 Von Freiheit und Maennerwuerde, von Treu und Heiligkeit.  
 Er singet von allem Sueszen, was Menschenbrust durchbebt,  
 Er singet von allem Hohen, was Menschenherz erhebt.”

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*PHONETICS IN THE HIGH SCHOOL.*

A. W. BURT, B.A., BRANTFORD.

It was not without some misgivings that I decided to accept the invitation of the Secretary of this Association to address you upon the subject of Phonetics in the High School, on which theme he desired me to introduce a discussion. The connection of Phonetics with orthoepy makes one who deals with the subject experience an uneasy consciousness that he is in the awkward position of a dweller in a glass house who is unwisely indulging in stone-throwing. The general existence of this sensitiveness is, perhaps, my best excuse for presuming to speak upon the theme.

Earnest and capable as are most of our High School teachers, and diligent and eager to acquire knowledge as are a majority of their pupils, it is nevertheless true that an ordinary graduate of our schools has few outward marks of the intellectual culture he attains. He will, it is true, leave school with a knowledge of mathematics more than sufficient to enable him to pass among his fellows as an educated man. He may even pass as a good reader, and yet, unless he has come from a cultured home, he never speaks without proclaiming that he lacks the chief external evidences of intellectual refinement:—a correct intonation and a pronunciation free from coarse provincialisms. Old country people, who are inclined, perhaps, to judge too much by externals, have an offensive way of expressing the effect of this lack of culture upon those with whom we are brought into intercourse. They class the man who drops his h's with him who conveys his food from his plate to his mouth with his knife; or the man who says "geo" for "go" or "paound" for "pound" with him who has a taste for nether garments of noisy patterns, and stigmatize such speakers as "vulgar." The general feeling that not to be "vulgar" is desirable is by no means free from objectionable issues, but among other good effects, it has this, that it causes every schoolmaster to aim at communicating refinement of speech and manners to his pupils. In the stress and hurry of preparing candidates for examinations, which soon comes to be the aim and end of their work, our schools neglect this important part of education, and pupils who have had the advantages of cultured homes are in the matter of external refinement injured instead of benefited by their course in school. It seems to me that in conjunction with the power to understand, and to use written English,

the most desirable accomplishment with which to graduate from school is the power to speak our language in a way, that to say the least, is not destructive of its euphony.

It is true that some attention is given to pronunciation in our reading classes; but there the object is mainly to give expression to the thoughts of writers in such a way as to be distinctly heard and understood by a large number of people. This is, of course, a valuable accomplishment, but it is one that to be often in requisition demands natural gifts of a high order, and is hence of comparatively trifling import to a vast majority of our pupils. Indeed I am by no means sure that elocutionary training is not often prejudicial to refinement of speech. It sometimes leads to an exaggerated attempt at correctness which is itself vulgarity. There are "Bachelors of Oratory" who I verily believe "elocute" their private devotions, and who always carefully mispronounce the last syllable of such words as "Creator" with the sound of "o" in the word "more," etc. Without refinement of tone the effort to speak distinctly only makes defects of utterance the more apparent. I have heard elocutionists of some note whose pronunciation was so exaggeratedly harsh as to make their recitations a very grawsome murder of sweet English sounds.

The correction of faults like these demands some training in phonetics, for without a knowledge of the mode in which the elementary sounds of our language are produced, the best teacher can do nothing but set a good example, a method of teaching pronunciation which is like teaching music without any knowledge of the theory, *i.e.*, teaching wholly by ear, as we say, to pupils gifted with "ears" and those devoid of that gift. Of course, we have a fuller experimental knowledge of the use of the exquisitely delicate mechanism of the human voice, than of that of any artificial instrument; but we avail ourselves so little of its infinite capabilities, that our speech is to what it might be, as the strumming of a tyro on the piano is to the ravishing harmonies a Paderewski can enable the same instrument to yield.

The fact that this training demands as a preliminary, a knowledge of the science of phonetics constitutes the importance of the subject, especially to those who, like most of the pupils in our high schools, have not only to extend the scope of acquirements already unconsciously attained; but to eradicate bad habits that have become ingrained by lifelong exercise. On the importance of phonetics both for its practical results in the refinement of speech, and as affording the only rational foundation for the scientific study of languages, Mr. Sweet, the great philologist and phonetician speaks as follows:

"Without a knowledge of the laws of sound change, scientific philology—whether comparative or historical—is impossible, and without phonetics their study degenerates into a mere mechanical enumeration of letter changes" (Those of us who have waded through Schleicher's *Die Deutsche Sprache* feel the force of this remark). Then after speaking of the study of dialects and savage languages, he continues: "Again if our wretched system of studying modern languages is ever to be reformed, it must be on the basis of a preliminary training in general phonetics, which would at the same time lay the foundation of a thorough practical study of the pronunciation and elocution of our own language—subjects which are totally ignored in our present scheme of education."

It will be observed that Mr. Sweet speaks of the advantages of the study of phonetics as fourfold: It is an aid to philology, to dialect study, to modern language teaching and to the acquisition of a correct enunciation.

Concerning the connection of phonetics with philology, it is only necessary to remark that opposition to phonetic spelling is in Canada usually based upon the assumption that it is an obstacle to philological research. It is a significant fact in rebuttal of this assumption that all the great modern philologists are not merely phoneticians, but advocates of spelling reform.

What Mr. Sweet says about the teaching of modern languages might be extended as far as possible to all languages, including the Classics, for no language can exercise its full humanizing influences upon us, if the written symbols do not call up to our minds the sounds they stand for, or once stood for; for we cannot but miss the spirit of the words, if we pronounce them in a manner that is a barbarous travesty upon their original melody.

To make apparent the place of phonetics in modern language teaching, I cannot, I think, do better than quote some of the principles of instruction laid down in *Le Maitre Phonétique*, the organ of the International Phonetic Association, a journal, by the way, to which every teacher of modern languages will find it to his advantage to subscribe. "The object of the Association is the development of the practical and scientific study of spoken languages, making use of the latest researches in Phonetics and of experience in teaching." "The first care of the teacher must be to render his pupils perfectly familiar with the sounds of the foreign language. For this purpose he will make use of a phonetic transcription which will be employed during the first part of the course to the exclusion of the ordinary spelling." "As far as the mother tongue is concerned, the Association highly

approves the employment of a phonetic alphabet in teaching reading to children and to the illiterate."

Mr. Sweet is a prominent member of the International Phonetic Association, so that I suppose we may regard these principles as the basis of the rational system of language teaching which he hopes will supersede "the wretched methods" in vogue. Teachers of languages in Ontario are now in the happy position of being free from what the Hon. the Minister of Education, says "hysterical people call the incubus of examination," at least long enough to employ methods of instruction disturbed by no considerations of immediate examination results. From the experience of classes in my charge or under my supervision, I can unhesitatingly affirm, that not only will pupils who study a language by the new system gain a more valuable and thorough training, but that the zest with which they pursue their studies under the more interesting conditions of rational methods, will cause them in the end to gain far greater distinction at examinations than the unfortunates who have been in the worst sense of the word, crammed, under the old system of grammar and dictionary teaching.

From what I have said you will have gathered that my plea for the introduction of phonetics into our High Schools is based first upon a sense of the need of a knowledge of this science as a means of cultivating refinement of utterance, and secondly, upon the belief that it is a key to the humanities—in other words a means of gaining full access to all the culture that the study of languages and literature may afford. It remains to consider briefly to what extent and in what manner the subject should be taken up in our schools.

I had no conception of the importance of a knowledge of the mechanism of speech until I read accounts of the mode in which deaf mutes are taught to articulate; the triumph of making those not only deaf, but blind as well, fluent and correct speakers, showing how much patient skill can achieve by teaching the movements of the speech organs in giving utterance to articulate sounds. Many of our pupils are deaf to the mistakes in their own pronunciation, so that the first step to be taken is to make them understand what has to be taught to the deaf before they can learn to speak, namely, the mode of operation of the speech organs. There is little use in abstract scientific teaching, all must be practical, the pupil being led to see and feel and hear for himself.

Next the study of English sounds may be taken up, the mode of their articulation described, and common faults in pronunciation noted. Then phonetic symbols may be introduced, lists of English sounds being given, following a mode of arrangement based upon their

organic formation. The use of the phonetic symbols must next be mastered by constant practice in reading and writing. In conclusion, exercises to develop the control of the voice in variations of pitch, inflection, rate of utterance, etc., may be given. If most of the spaces assigned on the time-table to reading are spent in this way during the first year, sufficient mastery of the subject should be gained for the needs of high school classes in English. Of course pupils who have taken such a course may not make a great showing as elocutionists, so that if that is what the High School Inspector looks for, they will not receive a very high rating in reading when he examines them in that subject. To compensate for this they should have gained the advantages of correcting many faults in pronunciation and of acquiring that habit of self-criticism which is the promise of self-improvement. They should, too, know how to proceed to correct their mistakes and have learned to value and hence to seek refinement of speech.

With regard to the use of phonetics in modern language teaching, I cannot do better than enlarge upon the principles I have already cited as laid down in *Le Maitre Phonetique*, recommending strongly a careful perusal of the number for January last in which Mr. Passy states at length the case of the language teaching reformers.

The teacher may begin by giving exercises on the mode of operation of the organs of speech; then, pronouncing words that are as nearly the same as possible in English as in the foreign tongue, he may shew the slight changes in mode of articulation that give the sounds their distinctive character in each language. Next sounds that do not exist in English may be introduced and the mode of their articulation carefully taught. Purely oral work should be kept up for the first few months. Then phonetic symbols may be taught as a means of writing the foreign language. After about a year of this work will come the reading of texts written in the conventional way, observation of the forms of words, etc., leading to inductive teaching of grammar and finally the writing of themes in the conventional form. A course like this will not lead to examination results worse than those attained under the old mode of teaching; and in addition to the knowledge this represents, the pupil will have within his reach the culture that language study affords in its fulness only when the written symbols are not bare forms standing for ideas which we have to express by clumsy translation into the sounds of the mother-tongue, but means of calling up foreign sounds that convey ideas directly to our minds, so that, untroubled by the intervention of translation, we can enter into the real spirit of the language we are studying.

*THE WOMEN IN CANADIAN LITERATURE.*

JANET CARNOCHAN, NIAGARA.

By this is not meant the women writers of Canada, but the women who figure as characters on the pages of Canadian literature. Some have denied to our writers the elements of true poetry, accusing them of a want of action, passion, life, scenery only being described. We are not here to defend Canadian poetry, it stands on its own merits and has gained for itself an acknowledged place on this continent and across the Atlantic.

What, however, do the most of us know of the women characters in Canadian literature? Let us be honest. Can it be said of us as is sometimes said, "he knows his Shakespeare," or, "he knows his Tennyson," that we know our own writers? Who can give even a list, who can give a sketch however slight of the May of the Canadian Idylls or Isa, or Laura Secord, or the Indian maiden Iena, or the Margery of Roberts, although it may be that the characters on the brilliant page of Gilbert Parker may be more familiar?

Do we find that in this free north land where the bracing air and clear sky should develop clear intellects and strong physiques, that the women on the pages of Canadian literature have developed any peculiar idiosyncrasies from their environment? Though there is much in heredity there is also much in our surroundings. Would Portia brought up in the home of Jeanie Deans show the same characteristics? In each is found a strong, noble character, divine tenderness, decision, adventurous spirit, a plea to save a life; the truly noble surmounts all difficulties, be the surroundings what they may.

If we cannot as in the Dream of Fair Women, summon a Helen "a daughter of the gods, divinely tall and most divinely fair," or a Cleopatra who "died a queen," or a Margaret Roper, "clasping in her last trance her murdered father's head," or an Eleanor who "drew forth the poison with her balmy breath," we still may from ocean to ocean bring a muster roll of heroic deeds, from Madame la Tour in the Siege of St. John, or Mrs. Catherwood's Romance of Dollard, of the beautiful French girl and Indian maiden sharing the fate of the devoted seventeen at the Thermopylæ of Canada, to the Laura Secord described by so many of our poets. And may it not be said that in the poem giving the highest conception of the strength of woman's

affection, faithfulness, filial tenderness, the most pathetic story of endurance,—*Evangeline*,—the heroine is a Canadian woman?

Our task, then, will not be to offer criticisms on the writers; this I should not presume to do, nor have I the ability, but by quoting from the descriptions of women by our Canadian writers, shew what ideal they have formed, though it may not be Wordsworth's "perfect woman nobly planned," nor Scott's "ministering angel," nor Tennyson's with features, "faultily faultless, icily regular, splendidly null," nor Shakespeare's "And she is fair and fairer than that word."

An ample refutation to the charge of a want of action, passion, life, is furnished in the page of romance, in Kirby's Canadian Idylls, the drama of Mrs. Curzon, or Charles Mair, or if we turn to fiction, while it must be confessed we have few writers in the first class, surely the magnificent plot of Le Chien D'Or, or that brilliant page, a veritable Field of the Cloth of Gold, of Gilbert Parker, in *The Seats of the Mighty*, shew skilful plot, subtle analysis of character, and make up in quality, what is lacking in quantity. It must be confessed, however, that in some of our Canadian poets we find almost an utter absence of what my title requires, but still enough for the purpose of the hour.

In the Canadian Idylls, the May who reads from the old M.S. of faded ink and yellow paper:

"A rosy maid who waited with  
Her milking pail and russet gown and kerchief."

In the ballad of Spina Christi with its lilting measure and martial ring:

"There lives a lady beautiful as any Provence rose,  
The chatelaine of Bois le Grand, who weepeth as she goes,  
For sleep hath left her eyelids on the banks of rapid Rhone.  
For three months wed, alas! she said, to live my life alone,  
Pining for my dead husband in his old chateau of stone,  
While he goes with his regiment, and I am left to moan,  
That his dead head so often laid at rest upon my knee  
No pillow kind but stones shall find, no shelter but a tree."

In the poem Bushy Run, occurs that most pathetic story, Parkman's history idealized by Kirby, of the Indians bringing in their prisoners and white adopted children; in one case the child clings to its Indian foster father and refuses to go to the real mother almost frantic with grief that her child has forgotten her, when the wise old general advises her to sing the nursery song of long ago, "Hush my babe, lie still and slumber," when the consciousness of long forgotten things, through the music and the words surged through the maiden's soul,

and she recognized the mother, and the Indian foster father sadly gives her up.

“ The fair-haired, blue-eyed girl, lovely of face,  
Slender and supple as the rush that stands  
Among the water-lilies, not less fair.”

In Stoney Creek, in Isa we find a higher intellect, fit to cope with the arguments of the sceptical lover.

“ A girl’s face, still a woman’s, her dark eyes  
Made for all joys were moist with tears. Her maiden cheek  
Wild roses not more delicate of hue.”

But with the ministry of suffering this sunny maiden develops into a strong, devoted, patient, daring woman, searching for Basil among the fallen :

“ With trembling hands yet firm she closed the wound  
And rent her garments softest lawn to bind,”

waiting on him for months, maimed for ever, unstrung alike in body and soul, until he through her

“ Saw a light not born of earthly ray,  
A glimpse of love divine.”

The carping criticism of that striking poem “The Mother” of William Wilfrid Campbell, falls to the ground before that wonderful weird picture of mother love, which represents the young dead mother as rising from the grave to take back with her the babe left on earth.

“ It was April—blossoming spring,  
They buried me when the birds did sing,  
Yet over my head I seemed to know  
The murmurous moods of wind and snow.  
I dreamed that a roseleaf hand did cling—  
Oh, you cannot bury a mother in spring.

I dreamed of my babe for a day and a night,  
And then I rose in my graveclothes white,  
But I stole me past the graveyard wall,  
For the voice of my baby seemed to call.  
My babe was asleep on a stranger’s arm,  
Oh baby, my baby, the grave is so warm,  
Oh come with me from the anguish of earth,  
Where the bed is banked with a blossoming girth.  
I nestled him soft to my throbbing breast,  
And stole me back to my long, long rest,  
For so much a part of my soul he has grown,  
That God doth know of it high on his throne,  
With the night airs that steal from the roaring sea  
Bringing sweet peace to my baby and me.”

And what shall we say of that vigorous, graceful writer, Mrs. Curzon, who has done so much for Canada by her writings? Her story of Laura Secord told in verse and prose, has been the most potent factor in the movement to raise a suitable monument which is soon to be erected. The heroine of the drama thus meditates, starting on that famous walk of nineteen miles, through lonely, muddy ways in danger alike, from Indians, American soldiers, wild beasts, marauders, supported only by a lofty patriotism:

“ Farewell my home  
Casket that holds my jewels.  
  
And let my love hide in your hearts,  
And with ethereal touch control your lives  
Till in that better home we meet again.”

And in the ballad of 1812, on the same subject:

“ And oft she trips, and oft she falls,  
And oft her gown is torn,  
And oft her tender skin is pierced  
By many a clutching thorn.  
And weariness her courage tires  
Over the hills and mongst the briers,  
And through the oozy swamp  
Her weary steps must never tire  
Ere burns the firefly lamp . . .  
Then all her errand done she seeks  
A lonely dwelling near  
And sinks, a worn out trembling thing,  
Too faint to shed a tear.”

In Chas. Mair's Teeumseh, Iena the beautiful Indian maiden, loved by Lefroy, who resists the pleadings of the Prophet to wed her to Tarhoy, wanders in search of her lover, meets him, and finally gives her life to save him, faithful to him alike in life and death.

That young, eager, poetie soul, Isabella Valancy Crawford, dying shortly after issuing a volume of poems, perhaps stung to death by cold criticism or the world's neglect, we find at least appreciated by another woman writing under the pseudonym of *Seranus*, Mrs. Harrison, herself a poet of no mean order. In a Monody on the death of her friend the graceful personality of the writer is seen no less than that of the dead poetess. Thus:

“ I weep for our dead Sappho, Sappho who was ours ;  
The great Greek knew her, shame that we did not,  
Yet was an early grave her earthward lot,  
Whom the gods love die young. Great Sappho raise  
Her drooping head, and tell her one hath come  
Late though it seems, with words of comfort and of praise.”

What more poetic passage than the picture of Canadian women, wives, mothers, sweethearts, by Miss Crawford in "The Rose of a Nation's Thanks?"

In 1885, when Toronto had almost literally gone wild in welcoming her returning volunteers, it was proposed to have a dinner in honor, with speeches, etc., before going to their homes to meet their loved ones.

" A welcome ! Oh yes, 'tis a kindly word, but why will they plan and prate  
Of feasting and speeches, and such small things, while the wives and mothers  
wait !

And what of it all, if ye bade them wade knee deep in a wave of wine,  
And tossed tall torches, and arched the town in garlands of maple and pine?  
All dust in the wind of a woman's cry as she snatches from the ranks  
Her boy who bears on his bold young breast the rose of a nation's thanks."

And what more striking character than the Indian girl drawn by Pauline Johnson in such a realistic way in "A Red Girl's Reasoning?" "Christine personally looked much the same as her sisters all Canada through, who are the off-spring of red and white parentage, olive complexioned, grey eyed, black haired, with figure, slight and delicate and a wistful unfathomable expression in her whole face." Christine, the daughter of a Hudson Bay trader and his Indian wife, marries Charlie McDonald and becomes the fashion in Ottawa society, but "balks," as her husband had been warned, when she feels herself insulted, leaves him and refuses to return, when he finds her after months of weary search ; the coldness with which she says "you killed my love when you said those two words," brings back the warning of her father to his son-in-law : " Be good to her or she will balk, kindness for kindness, bullet for bullet, blood for blood."

Arthur Weir's Valedictorian goes over all the vexed question, threshed out with such painful iteration and reiteration, of woman's sphere.

" Gowned and happy, capped and hooded, radiant with the glow of youth,  
Flute voiceā, like a bird full throated, she upholds the cause of truth ;  
Perfect woman of perfect woman, helpful daughter, gentle bride ;  
Rules she all with perfect influence, as the fair moon rules the tide,  
Open fling the doors of learning all the wisdom maiden's win,  
Some day shall the child that nestles at the mother's breast drink in.  
Woman stands at Heaven's portals, at the gate of Hell she stands ;  
Wraps her silken tresses round us, leads us as with iron bands ;  
Priestess of our birth and burial, empress of our joy and pain,  
Grant her knowledge lest she drag us backwards to the ape again."

In the poems of Seranus, in "A Poet's Sunday," is a beautiful picture of a wife's influence over her unbelieving husband.

" And fastens quick the glowing rose  
 Beneath the deeps  
 Of rounded chin and rounder throat,  
 The poet's wife in grey or brown  
 Long robes that float,  
 Throughout his house is always drest,  
 So soothes she with grave gown and glance,  
 She gives him rest."

In that romance so much admired, founded on the legend of the "Golden Dog," there are Amelie de Repentigny, frank, loving, faithful to death; Caroline sad, trusting, repentant; Angelique, sparkling, fascinating, wicked; La Coriveau the almost fiend. In the "Seats of the Mighty" a strong character is Alixe; so sweet, so daring, so modest, who has the wit to plan and the skill to execute, the constancy and self-control necessary to save her lover, so that some have wondered whether the wiles she used were consistent with so loyal, so gentle a soul.

In the works of that highly cultured writer Fidelis (Miss Machar), we find another version of Laura Secord.

" Then Laura bending o'er her babe  
 Said smiling through her tears,  
 These are not times for brave men's wives  
 To yield to woman's fears.  
 She soothed his anxious doubts and fears  
 She knew the forest way,  
 She put her trust in Him who hears  
 His children when they pray.

" Soon as the rosy flush of dawn  
 Glowed through the purple air  
 She rose to household tasks and kissed  
 Her babe with whispered prayer.

" If ere Canadian courage fail,  
 Or loyalty grow cold,  
 Or nerveless grow Canadian hearts  
 Then be the story told  
 How British gallantry and skill  
 There played their noblest part,  
 Yet scarce had won, if there had failed  
 One woman's dauntless heart."

A young, eager, vigorous Canadian writer in New York, is P.

McArthur who, in a few lines called "Heartsease," gives a pretty picture of a young mother left desolate.

" She rose to live her lonely part,  
A simple woman true and brave,  
And all the day she softly sung  
Low crooning airs that mothers sing,  
For to her weary heart there clung  
The peace that childish kisses bring."

Jean Blewitt, who writes such breezy and sympathetic articles, sweet and thoughtful, has a pretty picture in *The Old Valentine*:

" My sweetheart was pretty as she could be  
A wild rose bloomed in each cheek,  
Her auburn hair rippled down to her waist,  
Her eyes were tender and meek."

And Prof. O'Hagan's sweet and tender lines bear testimony not only to the character of the mother but to the manly, loving heart of the son as well :

" But all the music of the past and the wealth that memory brings,  
Seem as nothing when I listen to the song my mother sings,  
It's a song of love and triumph, it's a song of toil and care,  
It is filled with chords of pathos and is set in notes of prayer,  
Oh sweet, and strong, and tender, are the memories that it brings  
As I list in joy and rapture to the song my mother sings."

And shall we forget our own Roberts, perhaps the first of our poets, showing how true to duty and patriotism beats the heart of this strong singer, either when he tells of "Maple forests all aflame," or when "Canadian lips are dumb beneath Egyptian sands."

A sad tragedy is "The Tide in Tantramar":

" But Margery, Margery,  
'Tis something farther thou wouldst see.  
Long, long those eyes have watched in vain,  
Waited in fear and wept again.  
Is it no more than lovers' pain  
That makes thy heart so wild ?

Then came a lonely hulk the Belle  
And drove athwart the waste,  
They knew no light or any star,  
And where the maid and lover are  
They know nor fear nor haste.  
And at her spinning wheel within  
The mother's hands forgot to spin,  
So weary all her days have been  
Since Margery went away."

As a contrast "Crossing the Brook":

" Oh, it was a dainty maid that went Maying in the morn,  
A dainty, dainty maiden of degree.  
The ways she took were merry and the ways she missed forlorn,  
And the laughing water tinkled to the sea.  
The little leaves above her loved the dainty, dainty maid,  
The little winds they kissed her, every one ;  
At the nearing of her little feet the flowers were not afraid ;  
And the water lay a-whimpling in the sun."

Had the works of Frechette and other distinguished writers of Quebec, who, Canadians like ourselves, use the French language, been referred to, this list might have been much extended. It must be admitted that woman has been sympathetically treated by our writers, appears at her best, realizing a high ideal. Let us then not only be proud and strive to make those around us proud of our noble heritage of rolling river and mountain peaks, of lofty azure arch, of mineral wealth, of freedom, of good laws and constitutional government, but be proud also of our literature with its rich stores of the picturesque features of early pioneer life, of noble patriotic deeds, of devotion, of sturdy independence. Some day may arise a Canadian writer to do for us what Kipling has done as an Anglo-Indian, for the country of his birth, and in these future pages may the woman still be found tender and true, strong and courageous, unselfish and noble, with a will to do and a soul to dare.

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*KING ARTHUR AND THE HOLY GRAIL.*

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Whatever conclusions may ultimately be arrived at concerning the origin of the Holy Grail, the accident of the incorporation of the legends dealing with it with those embodying the story of Arthur, or concerning the determination of the question of Arthur's personality, one of the most attractive books describing the quest of the Holy Grail and the other exploits of the Knights of the Table Round will always be, for English-speaking peoples at any rate, Malory's *Morte d'Arthur*.

Of Malory himself little else is known beyond the information he himself gives us at the end of his romance—"this book was ended the ninth year of King Edward the Fourth by Sir Thomas Maleore, knight, as Jesu help him for his great might, as he is the servant of Jesu both day and night"—thus placing him about the year 1470, at the very beginning of what we are accustomed to call modern times.

In one passage in his book there appears to be a reference to contemporary history, with the possibility that Malory may have been a Lancastrian. Speaking of the rebellion of Mordred against King Arthur, in which many turned against the king, he says: "Lo ye, all Englishmen, see ye not what a mischief here was, for he that was the most king and knight of the world, and most loved the fellowship of noble knights, and by him they were upholden, now might not we Englishmen hold us content with him. Lo, thus was the old custom and usage of this land. And also men say, that we of this land have not yet lost nor forgotten that custom and usage. Also, this is a great default of us Englishmen, for there may no thing please us no term. And so fared the people at that time; . . . . . And the most party of all England held with Sir Mordred, the people were so new fangle."

Albeit the feudal system was breaking up, perhaps because of that fact, Malory draws for us a picture of a feudal king, instead of portraying a British chief and his clan gaining the supremacy over other chiefs and clans. Because of his ability to draw the sword out of the anvil of steel set in the block of stone, Arthur was hailed as king by lords and commons. At the coronation "was he sworn unto his lords and the commons for to be a true king, to stand with true justice from thenceforth the days of this life. Also then he made all lords

that held of the crown to come in, and to do service as they ought to do." To those who had been wrongfully deprived of their lands amid the anarchy that succeeded his father's death, he restored their own, then he "established all the countries about London," appointed the high officers of state, proceeded to subdue the north country, Scotland, and Wales; "and he overcame them all, as he did the remnant through the noble prowess of himself and his knights of the Round Table."

The country being quieted, the days passed merrily enough in joust and tourney, the king bearing himself in so knightly a fashion that all questions of doubt as to whether he was really the son of Uther Pendragon or only of his foster-father, Sir Ector, were forgotten, and "all men of worship said it was merry to be under such a chieftain that would put his person in adventure as other poor knights did."

(Here followed a *résumé* of the story as given by Malory, touching in greater or less detail upon Guenever's marriage, the foundation of the order of the Knights of the Round Table, Sir Galahad's life, his quest of the Holy Grail with Launcelot, Bors, and Percivale, the return home of Bors and Launcelot, Agravaine's plot against Launcelot and the Queen, the quarrel consequent upon it, the fight between the King's and Launcelot's armies, the rebellion of Mordred, the death of Gawain, Arthur, Launcelot, and Guenever.)

Such is in bare outline the story of *Le Morte d'Arthur*, but, though much has necessarily been omitted, enough has been said to show that there is something of a plot leading up to the climax, the death of Arthur. I have pointed out that in the story there are some references to contemporary history, that the colouring is derived, partly at least, from the days of the crusades and of feudalism as it existed in the days of the earlier Plantagenets, while the church influence is quite on the surface of things in the monastic idea, whether regarded in itself or in the chastity, charity, and truth which were the chief requirements in him who was to succeed in the quest of the Holy Grail.

If other evidences of churchly influence were needed, they might be found in the descriptions of the scenes in the castle of the Grail, where there were seen as it were priests or bishops as in the sacring of the mass, and a child disappearing in the elements—an evident outcome of the doctrine of the real presence.

The bishops, too, are haughty folk; the Archbishop of Canterbury bids "all the lords of the realm, and all the gentlemen of arms, that they should to London come by Christmas, upon pain of cursing;"

and, again, when Mordred had usurped the throne, and was trying to force Guenever to marry him, the bishop said, "I shall curse you with book, and bell, and candle." When the usurper still refused, in rather forcible and threatening terms, to listen to him, we read that "the bishop departed, and did the curse in the most orgulous wise that it might be done,"—a relic of the days when interdicts meant something and when quarrels between king and church were very serious affairs.

Turning from Malory, it is strange to find that his imitators and continuators belong chiefly to this century. To be sure, Spenser's resemblance to him is easy to see; Milton uses some of the names of *Le Morte d'Arthur* in the banquet scene in the beautiful description of the temptation in *Paradise Regained*; Mr. MacCallum makes mention at considerable length of a play called *The Misfortunes of Arthur*, written by Thomas Hughes in 1587; Scott tells us how

"Dryden in immortal strain  
Had raised the Table Round again,  
But that a ribald king and court  
Bade him toil on, to make them sport;"

Bunyan owes, perhaps, something of his charmingly simple style to Malory, while there can be no doubt as to the lions which so greatly affrighted Christian as he toiled up to the House Beautiful having for their originals the lions which kept the entry to the castle of Carbonek when Launcelot was making his way thither and found his heart turn faint within him. But, after all, it is not till we come to Wordsworth, Tennyson, Swinburne, Matthew Arnold, and James Russell Lowell, with others who might be mentioned, that we find a revival of interest in Arthurian story.

To take the greatest first. It would be interesting, did time permit, to find out points of resemblance and difference between Malory and Tennyson, but I take it that, in any case my doing so would be unnecessary, considering the outline of Malory I have already given. Now that the *Idylls* form a completed whole and that we are to see in them an allegory "shadowing Sense at war with Soul," or, as Mr. Hutton well expresses it, "poems in which the gradual growth and fall of the ideal kingdom of the spiritual chivalry are depicted," it would be worth while to trace the steps by which the love of Launcelet for Guinevere (permissible enough in the old days of chivalry as long as it did not bring him into a position of personal disloyalty to his feudal superior), the envy and malice of Modred, and the quest of the Holy Grail by degrees undermine the order and at last destroy it.

It might not be out of place, either, to take individual characters, such as Geraint and Gareth, to show how each in his own way attained the ideal or, on the other hand, to show how Merlin, Balin, and Balan, by devoting themselves to sense, failed of attainment to it. But so much as been said upon the *Idylls* that I shall content myself with merely taking the general drift of the ideas that fit in with the title of my paper.

The Holy Grail, which here seems to be typical of the perfecting of character by means of religious enthusiasms or, in other words, by means of the consideration of the Love of God alone and the hope of winning to Heaven, here takes the second place, while obedience to vows such as Arthur imposes on his knights, obedience to vows "that it is a shame they should not be bound by" and yet which are hard to keep, is the main thing, for these vows cover the development of character and the righting of human wrongs *for* the Love of God;—a doctrine which reminds one very forcibly of the gospel of human destiny worked out by Gœthe in his *Faust*.

" The sphere of earth is known enough to me ;  
 The view beyond is barred immutably :  
 A fool, who there his blinking eye directeth,  
 And o'er his clouds of peers a place expecteth !  
 Firm let him stand, and look around him well :  
 This world means something to the Capable.  
 Why needs he through Eternity to wend ?  
 He here acquires what he can apprehend.  
 Thus let him wander down his earthly day ;  
 When spirits haunt, go quietly his way ;  
 In marching onwards, bliss and torment find,  
 Though, every moment, with unsated mind ! "

In King Pellam, the lineal descendant of Joseph of Arimathea and the custodian, therefore, of the Grail, we may see, I think, without straining our imaginations too much, all of those who, by whatever name they call themselves—hoary patriarchal church or sect of yesterday—withdraw themselves into a splendid and superior isolation, because of some special revelation or distinguishing dogma that gives them almost the sole right to Heaven, and that debars from entering it all those who do not hold with them. Other—worldliness, too, might be seen in him—the sort of *unco-guidness* that makes much of the wickedness of everyday life, and of political life in particular, while, in the same breath that it praises itself for keeping out of it, it slanders those who in their own way are doing their best to make everything around them sweeter, better, purer, and cleaner.

In Swinburne's *Tristram of Lyoness*, on the contrary, there is nothing of high moral purpose, even for a background, as might naturally be expected from the strictures he has passed upon Tennyson's "preachment." There is a fine story, beautifully told in exquisite language. Fate is the guiding principle and at the end Tristram and Yseult float out on the unknown to the peace and rest of nothingness or, at best, to the calm and beauty of the spirit of the universe of which they are a part.

The poem opens with a pretty conceit which takes one of all the famous world-beauties as a sign for every month of the year. *The Sailing of the Swallow* shows us Tristram talking courteously to Yseult whom he is taking from Ireland to Cornwall to be bride to his Uncle Mark. A storm springs up and Tristram takes an oar. Wearied with his toil, he asks Yseult for a drink and she gives him to drink from a phial carried by her maid, Brangwain, and mingled for her to drink on her marriage night with Mark, her husband. She,

" With light lips yet full of their swift smile  
 And hands that wist not though they dug a grave,  
 Undid the hasps of gold, and drank, and gave,  
 And he drank after her, a deep, glad, kingly draught ;  
 And all their life changed in them, for they quaffed  
 Death ; if it be death so to drink, and fare  
 As men who change and are what these twain were.  
 And shuddering with eyes full of fear and fire  
 And heart-stung with a serpentine desire  
 He turned and saw the terror in her eyes  
 That yearned upon him shining in such a wise  
 As a star midway in the midnight fixed.

Their Galahault was the cup, and she that mixed ;  
 Nor other hand there needed, nor sweet speech  
 To lure their lips together; each on each  
 Hung with strange eyes and hovered as a bird  
 Wounded, and each mouth trembled for a word ;  
 Their heads neared, and their hands were drawn in one,  
 And they saw dark, though still the unsunken sun  
 Far through fine rain shot fire into the south ;  
 And their four lips became one burning mouth."

Of the happy days that followed, how she was true to him, though another man was her husband, and he to her though another woman was his wife, I can only speak in passing. When he is away in Britanny with Yseult his wife, Yseult of Ireland is stricken with remorse and in most passionate words, to an accompaniment of shrieking, wailing winds, tells how she would be lost, could he but

escape guiltless. He comes back to her, and Joyous Gard, which Launcelot had lent them, is a happy place. But the other Yseult, Yseult of the White Hands, is biding her time and, though she tends him like a wifely wife when at last he returns to her, wounded in an encounter with caitiff knights, her vengeance comes. Dying, he yearns for a sight of his first-love again and his brother-in-law goes to fetch her. If she were coming, the brother-in-law's sails were to be white; if she were not, the sails were to be black. Yseult, the wife, had overheard the two men arranging about the sign and when she goes at Tristram's request to see if a sail is in sight, she brings back word that they are black, whereupon Tristram dies. On landing, Yseult of Ireland learns that she is too late and she dies also. In *The Sailing of the Swan* we read how they were sent back to Cornwall and how Mark, learning their secret at last, relents and buries them royally in a part of Cornwall which is now covered by the sea.

Here the ending is different from that found in *The Last Tournament* as well as from that given to the story by Matthew Arnold. In the former Mark comes upon the lovers by stealth after the ruby tournament, as you will remember, and stabs Tristram in the back, shrieking "Mark's way." In Arnold's *Tristram and Iseult* we find Tristram tossing in fever and tended by Queen Iseult, the other Iseult, the wife, patiently suffering her rival to do her kindly office. After "one last kiss upon the living shore" which he begs of her, she bends over her dead lover, and we are simply told:—

" Yes, now the longing is o'erpast,  
Which, dogg'd by fear and fought by shame,  
Shook her bosom day and night,  
Consumed her beauty like a flame  
And dimm'd it like the desert blast.  
And though the bed-clothes hide her face,  
Yet, were it lifted to the light,  
The sweet expression of her brow  
Would charm the gazer, till his thought  
Eras'd the ravages of time,  
Fill'd up the hollow cheek, and brought  
A freshness back as of her prime—  
So healing is her quiet now.  
So perfectly the lines express  
A tranquil, settled loveliness,  
Her younger rival's purest grace."

The "younger rival" spends her remaining days in good works and the care of her children, of whom we do not hear in other versions

of the story, and the last seen of her is as she stands upon the sea-shore telling the little ones the story of Merlin and Vivien, which she brings to a close with :—

“ And in that daisied circle, as men say,  
Is Merlin prisoner till the Judgment day ;  
But she herself whither she will can rove—  
For she was passing weary of his love.”

Of Merlin and Nina taking a bride to Britain from the shipwrecked Waterlily, of Galahad’s possible longing for an earthly companion, of Guenever’s Defence, which again calumniates Gawain needlessly, of the meeting of Launcelot and Guenever at King Arthur’s Tomb, as told by William Morris and by Wordsworth, I had intended to say something, but I have already gone to a greater length than I intended to do. Suffice it to say that ideals have changed since the fifteenth century and, though much that the old romance writer wrote has been changed or left out by our latter-day poets, Arthur and the Holy Grail have for us as true a meaning as they had for those who lived in the days when feudalism and the old Roman Catholic Church held undisputed sway.

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*WASTE EFFORT IN MODERN LANGUAGE TEACHING.*

J. C. ROGERS, B.A., BRADFORD.

What I have to say will not seem new, but I hope it will seem important. Repetition is sometimes as needful as originality.

In regard to High Schools and their teachers at present, "It doth not yet appear what we shall be." I think, however, that as long as students are prepared for the Universities, Modern Languages will have a place in the High School course of study. If that is the case we need to make the teaching of them as effective as possible.

It seems to me that the chief reason for our learning foreign languages is that we may broaden our views and reach a juster estimation of what other nations have done, are doing, and are fitted to do in regard to the progress of the world. To do this we must study the literature, past and present, of such nations. We cannot visit foreign countries very often so we must come into touch with the life of their people by means of books and periodicals. A speaking knowledge of foreign languages is exceedingly useful, but it is not indispensable. The important thing is ability to read and enter into the spirit of what is read.

On account of the broadening effect of Modern Languages on the mind and sympathies, I consider them of high value to those who are to mould public opinion. Teachers certainly come under that class. The general sentiment of a nation towards a foreign nation is very largely derived from teachers and text-books. For example, if teachers in the United States during the last twenty-five years had been broad in their sympathies, and had been allowed to use text-books moderate in tone, we should not have had the mutilation of the arbitration treaty to-day.

This brings up a point to which I may be permitted to refer just here. We need to increase the respect of our students for what has been done by nations other than our own. No doubt we are the smartest nation on earth, but if we look into things carefully, we may find that the other fellows amount to something after all. Let us then, have a few good biographical sketches of noted Frenchmen and Germans and we shall be able to do very well without the wonderful serpents and Niagara wild-cats of Chateaubriand, or the adventures of Hans im Glück.

The results of a great discovery are usually classified and made available for mankind by those who follow the discoverer. The work of the teacher is of this kind. He must have breadth of view enough to grasp a subject as a whole, and sound judgment as to the best way of leading his students into a knowledge of it. He must be able to seize upon what is relevant to any particular stage of his students' progress, and must teach so that there shall be unity in his students' knowledge of the subject. Let me give an illustration: Every great poem is a discovery—a deeper view of life than had prevailed before. It is the work of the teacher to make this discovery available to his students. Even if *he* could feel the spirit of the poem as the poet felt it, the state of his students' development would prevent *their* entering into it so deeply. Hence the teacher must select material, classify and arrange it, and so vitalize it from his own personality that his students grasp, not fragments, but a living unity, and receive an idea of the poem which will be a joy their life long, and will serve as a nucleus to which later and fuller knowledge will naturally and vitally attach itself.

What is the discovery in Modern Languages whose results we are to make available to our students? There are many, but I think the chief one is this: That which is admirable in the life of the people as revealed in their literature. Now our students begin the study of this literature in the primary French and German Readers, and in fact many of them never go beyond these books. It is important, therefore, that those Readers should be the best possible; we cannot afford to make many mistakes at the foundation.

From what I have said it will be clear that in the study of Modern Languages I place ability to read and appreciate higher than I place ability to speak, or translate, or compose. I do not by any means disparage these last, I use them constantly, as an aid to the reading, but I consider them of secondary importance. Many of you have read Professor Macgowan's essay in Heath's Pedagogical Series. He says: "The Reader is the centre of Modern Language teaching," and as far as High Schools are concerned, my experience makes me say the same thing. If the Reader is properly constructed and used it gives practice in pronunciation, material for grammar, exercises for translation, and a basis for conversation, and written composition. Much waste of effort can be avoided, therefore, by a proper use of the Reader.

The first waste I shall mention is in regard to pronunciation. The student should be taught to pronounce carefully from the very first;

if he is not so taught he tries to pronounce the French or German in accordance with English, and valuable time is wasted later, when the teacher wishes him to read aloud, to take part in oral composition, or to attend to a question or explanation given in the foreign language. Many chances for rapid review are lost for want of early training in pronunciation.

As the Reader is the gateway to the literature, the exercises in the grammar should be very largely based upon it, both as to vocabulary and structure of sentences. Grammar is always best studied in connection with the living literature. In starting our students in the Reader we must remember :

- (1) New knowledge must be linked to old.
- (2) The proportion of the new must be much less than that of the old.
- (3) The difficulties should be of such a nature and be introduced at such a stage that the student can surmount them without being "lifted over" by the teacher. Without much self-effort there cannot be healthy development.

How fully is the above carried out in the transition from the grammatical exercises to the Reader?

I turn to the Primary French Reader—an excellent little book in many ways—and alongside the nouns in the first extract I place those from the first vocabulary in the High School French Grammar :

| <i>Reader :</i> | <i>Grammar :</i> |
|-----------------|------------------|
| dog             | friend           |
| river           | horse            |
| bridge          | brother          |
| piece           | garden           |
| meat            | John             |
| mouth           | book             |
| water           | house            |
| shadow          | Mary             |
| trouble         | pear             |
| world           | apple            |
| edge            | sister           |
|                 | carriage         |

Not a word in the first list which can be found in the other!

In the second vocabulary from the Grammar the only duplicate is "dog." In the third pair of lists there are no duplicates; in the fourth there are two, viz: "friend" and "field." But perhaps I am

using too narrow a basis of comparison ; let us consider the first ten extracts from the Reader, and the first ten vocabularies in the Grammar. Excluding those repeated I find about one hundred and thirty-five nouns in the Reader, and eighty-five in the Grammar. Of these eighty-five, only eighteen are found in the list from the Reader. I submit that the proportion of new material in the Reader is much too great. This is still more evident when we take into consideration words that are not nouns. The earlier grammatical exercises ought to give a strong grip on the earlier part of the Reader ; if they do not, the cause must be one or both of the following :

(a) The material in the grammatical exercises is not based on the Reader as much as it might and should be.

(b) In vocabulary, idioms, etc., the first part of the Reader is not suitable for a beginner.

But theory must be tested by experience. This year I have been experimenting especially with my junior French class. I started them in the Reader much earlier than usual, but for some time previous I gave them practice on sentences illustrating the usual grammatical points, but based on the Reader as to vocabulary and structure. Of all the classes I have ever taught this one has taken hold of the Reader most quickly and heartily, and has made the best progress. I feel convinced that with the proper correspondence between the grammatical exercises and the Reader, at least one month can be saved on the year's work, and I am inclined to say two months.

Another waste of effort is connected with the grammatical vocabularies mentioned above. These should never be arranged alphabetically, but as far as possible should be in groups, taking care not to make the groups too large. For the sake of obtaining a group it is often advisable to add a few words to the vocabulary, though they may not be used at once in the corresponding part of the Reader. For example, I always group the seasons, the months, days of the week, numbers up to ten, common domestic animals, most common prepositions, members of the family, etc. These groups present several advantages. The student is more interested in the group than in detached words, he can commit them to memory more easily and remember them longer; to the teacher they are of great utility for rapid review and practice in oral composition. The vocabularies at the end of the Grammar should be alphabetically arranged as they are now, but this arrangement is a positive injury in the special vocabularies, as it hinders the student from making the best progress and

gives the teacher much unnecessary work. I subjoin a vocabulary from the German Grammar as an illustration :

|              |             |
|--------------|-------------|
| Tuesday      | marsh       |
| enemy        | day         |
| finger       | carpet      |
| Friday       | curtain     |
| foot         | week        |
| general      | room        |
| youth        | thirty      |
| emperor      | five        |
| acquirements | long        |
| king         | new         |
| Wednesday    | magnificent |
| Monday       | red         |
| officer      | seven       |
| town         | white       |
| Sunday       | where       |
| Saturday     | twelve      |

Do you think that this vocabulary would be any less interesting and effective if it had illustrated to a much greater extent, the principle of grouping ?

Another great waste of effort is in respect to teaching prose. Take, for instance, the work of our matriculation students. The teacher gives work of his own composition based on the authors read, or he uses the exercises placed in the back of the book by the editor, or he uses another book not bearing on the texts read. There is a great amount of vagueness as to the standard of excellence to be reached, the best means to reach it, and the amount of ground that should be covered. Now with a suitable Reader these sources of waste would largely disappear. We should base prose on the Reader, and not try to cover too much ground. Ten pages of the Reader would be ample for Primary prose, twenty-five for Pass Matriculation and Junior Leaving, and fifty for Honor Matriculation and Senior Leaving. Any supplementary work thought necessary, could easily be added by the teacher in a few special lessons. The above implies that the Reader should form part of every High School examination, and that is just what I believe. It should be used not only as a basis for prose but as an author to be read.

I shall not dwell on the waste which arises from imperfect knowledge on the part of the teacher. We all feel it, and perhaps most

keenly in regard to our own language, the one we have known and used since childhood. I shall trespass on your time only long enough to summarize what I have said—what my own teaching leads me to believe.

1. The great aim in the study of foreign languages is to come into sympathy with the best in the life of other nations.

2. This must be reached chiefly by becoming acquainted with foreign literature.

3. Hence, the important thing for our students is ability to read foreign literature and enter into the spirit of what is read.

4. The Reader is the gateway to this literature.

5. Therefore, the Reader should be made as perfect as possible ; all preliminary work should lead up to it, and conversation, prose, etc., should be based upon it.

6. Lack of this (5) causes much of the avoidable waste of effort in teaching Modern Languages.

Perhaps my fourth statement is most open to question: "The Reader is the gateway of this literature." Each particular "method" asserts its right to be considered this gateway. The one which seems to me to have the best claim is that of M. Gouin, which is effective largely because of certain things which I have mentioned above, viz: the teacher keeps a definite end in view, has a clear idea of the means to reach it, and does not try to cover too large a piece of ground at one time. I have tried to show how these and other advantages may be gained ; it is for you to judge of my success.

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*THE LYRIC POETRY OF KEATS.*

R. S. JENKINS, B.A., ORANGEVILLE.

The volume that contains the works of Keats is not large, nor is it one which will be often found in the hands of an ordinary reader. In the case of this poet fate acted in the cruellest way. It gave him just time enough to prove, beyond dispute, that he possessed strong poetic power, and then cut his life short at the age of twenty-six. As a consequence of his untimely death we have from him no great masterpiece which will incontestably place him among the chief poets of our language. Therefore we must examine his poems with a sympathetic insight, and with a careful appreciation of the limitations imposed by his youth, before we can decide as to the position he would have occupied, if his life had been prolonged. On the other hand we ought not to underestimate the value of the work which he has actually left us, though it must be admitted that on the whole its merits are such as will appeal only to the more ardent lovers of poetry. There are hardly any of his poems that will attract the attention of the hasty and thoughtless reader. And yet, though they are defective in many ways, it would be easy to make from them an anthology of shorter passages, so exquisite in their beauty as to delight the soul of the worse of Philistines. For instance, in *Endymion*, amid a great deal of verse that is sometimes commonplace, and often monotonous, but yet has an indefinable quality about it which reveals it to be but the first unskilful works of a future master, we come frequently upon lines of marvelous excellence that at once enchain the attention. There is every reason to suppose that, if Keats had lived, he would have attained to unusual poetic power. Perhaps he might even have rivalled Shakespeare in control over the mysteries of language.

But on the other hand, it must be admitted that in knowledge of the human heart, and in ability to depict life with all its warm reality, there is no evidence that he approached in any way the great dramatist. This must be the conclusion of everyone who attentively examines the work which we actually have from him. Of course, it must not be forgotten that such qualities are the last to appear in a writer, and require for their perfection maturity of mind. Hence it is possible that if Keats had not died so young, there might have been an awakening of this higher power within him. Still we find that all his tendencies were away from the actual world to an unreal world

that was created by his fancy. And yet, in apparent contradiction of this, he was a close and interested observer of all the phenomena of nature. He speaks himself of his seeming to enter into the life of those about him, and almost to lose for the time the sense of his own personality. In a letter he writes: "If a sparrow come before my window, I take part in its existence, and pick about the gravel." But the images which were thus acquired did not change into new combinations as real as themselves, but were built up instead into strange and fanciful forms. Keats' mind unconsciously altered from the natural proportions everything it touched. Not so much, indeed, as in the case of some poets, but yet enough to sever him from Shakespeare, in whose dramas men and women come before us real, as in life, and filled with its rich power. Consequently it would seem more natural to regard him as the author of poems like *The Princess* or the *Idylls of the King* than of a *Lear* or an *Othello*.

Then it may be asked, in what would have consisted the great excellence of the works of Keats, if he had lived long enough to attain his full power? I believe that by reason of his utter devotion to the principle of beauty, he would in the end have produced works of such a surpassing loveliness of language and conception as the world has never known. In a general way Coleridge's *Ancient Mariner*, in its departure from the ordinary life of humanity, may be taken as the type of the work which Keats' matured genius would have done. But there would never have been the same self-containment in Keats' composition as appears in that of Coleridge. Our poet, as we know, fairly rioted in the glories of beautiful thoughts and expressions: but out of this very chaos of lawlessness would have arisen a new creation lovely beyond imagination, boundlessly and incomparably delightsome.

But what reasons would lead us to form such an exalted estimate of Keats' genius? Can we discover anywhere in his writings indications that would seem to promise such a glorious fruition? I believe that not even the careless and unsympathetic eye can wholly overlook them. First there is his abounding richness of poetic fancy. We discover in his work nothing of the bareness and baldness of statement that one is accustomed to note in the composition of the essentially unpoetical man. The poet's thoughts come before us with all their flowing drapery about them. Secondly, may be mentioned his wonderful control of expression, and his sensitiveness to the music there is in human speech. We find everywhere evidence of the variety and extent of his vocabulary. Nothing is more remarkable than the apparent ease with which his ideas flow into words. He seems never

to be at a loss for language in which to express all the finer shadings of his thought. Thirdly, it is to be noted that Keats possessed what is an indispensable requisite in all true art, the power of giving unity to his work. In a poetical composition the subject-matter should be so presented that the total impression left with us, is one of order and completeness. Also the sound-effect of the poem as a whole should have a distinctive tone into which that of all the various parts blends without discord. A poem that produces within us this impression of unity in thought, feeling and word-music, is the wonderful *Ode on a Grecian Urn*. A fourth reason why we must conclude that Keats would have been one of the very greatest poets if he had lived, is to be seen in his continual growth in the power of making his work appeal to the universal heart. At first a poet, through a lack of a wide knowledge and experience of life, is unable to cause his works to be of interest, except to persons of his own way of thinking. His whole style of writing will be recognized as narrow and self-centred, as something apart from the full rich life of humanity. He will be too academic, or too trifling, or too coarse and uncouth, according to the nature of the soil from which his genius has sprung. In the great poet, however, this period gradually passes away, and is succeeded by that of more perfect work. In Keats' case likewise, it was pretty well over, and his later production would have been of a very high character indeed. Thus we see that in respect to the possession of all the four qualities that are characteristic of a great poet, namely, richness of fancy, mastery of language, unifying power, and a thorough sameness of thought and feeling, Keats had already fully proved his claim, or was in a fair way to do so.

Such then is the opinion one must form of Keats' poetry as a whole, but my duty to-day is to discuss only one division of it, namely, that which includes his lyric production. Our plan of study will be first to consider briefly the most important of the various classes of lyrical poems to be found in the volume of our author's works, and afterwards to examine more minutely the *Ode to a Nightingale*, which exemplifies pretty well the main characteristics of his genius.

[Here followed a discussion of the minor lyrics, special mention being made of those written in seven-syllabled couplets.]

An important division of Keats' work is that of his sonnets, some of which are undeniably beautiful. And yet he cannot be regarded as at his happiest in this style of writing, the sonnet from its very nature demands delicate perfection of detail, rather than overflowing abundance of fancy. Such a poet as Keats is likely to produce work which

seems a little rude and coarse when enclosed in its exquisite form. He cannot bring himself to moderate the magnificent sweep of his brush. It is just as if a detail in a picture for the ceiling of some great hall were set in a delicately-wrought golden frame. There could not fail to be some incongruity. Consequently we find that, although Keats was a master of word-music, even some of his best sonnets are in places marred by unmistakeable discords. Moreover, the very ease and readiness of expression which ordinarily charm, here offend, as seeming to be incompatible with minute carefulness of workmanship. And yet when all this is said, when every allowance is made for shortcomings in many ways, we cannot but admit that a few of his sonnets are all but perfect in manner and conception, and that nearly everyone of the rest contains some part or other of great beauty.

We come now to the last and most important division of Keats' lyrical works, the half-dozen of beautiful odes he has left us. Of these the three most noteworthy are the *Ode on a Grecian Urn*, *To a Nightingale* and *To Autumn*. I have chosen for more careful consideration the *Ode to a Nightingale*, not because it is the best of the three, which it is not, but because it is likely to be more familiar to many of us than the *Ode on a Grecian Urn*.

In reading over the poem, that which particularly strikes us, is the exquisite beauty of its language. How soft and flowing the phrases are!

'Tis not through envy of thy happy lot,  
But being too happy in thy happiness.

How natural and unforced seem the lines! Nowhere else is higher testimony borne to Keats' thorough control over our English speech than throughout this short poem. Everywhere in the ode we find examples of his rich power of expression. We see with what deftness he crystallizes into language the most elusive shadings of his thought. His epithets, too, are full of a manifold suggestiveness, and seem not to be laboriously sought out, but to rush in, as if of their own accord, to give the expression an ideal fulness. Not less remarkable than his power of amplifying, of expressing thought at length, is his ability to condense. Especially striking is this in transitions from thought to thought, and in shiftings from scene to scene. The uninteresting intervening steps are made in a moment. Thus it will be noticed that when the poet leaves the open garden, where he first heard the song, and enters the wood, the change occurs instantly in an exclamation, "Already with thee!" Likewise it will be observed how the transi-

tion from description to narration is made at the beginning of the sixth stanza by the words, "Darkling I listen," where the epithet "darkling" recalls to us in briefest space the whole surrounding scene so admirably described in the two preceding stanzas.

Further this poem reveals how inexhaustible is the store of fancy and imagery at the writer's command. For instance, the misery of life is vividly expressed in the words, "the weariness, the fever, and the fret." A little further down the page, the perfume of the spring woods is described as "soft incense hanging upon the boughs." But most remarkable of all the various features of this ode is its beautiful music, so well reproducing, in as far as language can, the peculiar softness and richness of the nightingale's song. Moreover, the same characteristic tone is maintained throughout the poem from the first outburst of rapturous delight through the various passages expressive of the poet's longing for the nightingale's unalloyed happiness, his weariness of the misery of our present life, and his consequent despair and desire of death, to his awakening at the close when the spell of the bird's song is removed. This perfect unity of sound-effect is what lends to the ode much of its charm.

But back of all this, and giving to the work of art its soul (if we may so speak), is the manifest sincerity which everywhere pervades it. We recognize that the passionate longing for unattainable happiness and peace, springs from the depth of an anguished heart. This genuineness of feeling leads us to overlook any defects which may appear in the poem, as for instance, the harshness and baldness of the line, "to thy high requiem become a sod," where one cannot help thinking that the last word is used chiefly for the sake of the rhyme.

But with these somewhat random criticisms I must close my brief survey of Keats' lyrical work. I have tried to keep before you throughout, both the excellence of his composition and its defects, and consequently there is little need to give a final estimate, or to perform any process of critical addition and subtraction. In brief the work of Keats may be compared to a half-finished temple. One sees everywhere about the partially-built walls exquisitely-shaped pillars in various positions. Some are erect and in their proper places, while others are lying on the ground. Of the latter some are but roughly chiselled as yet, and await the final touch of the artist's hand. Others are complete and only require to be placed in position. Beautiful statues likewise meet the eye, a few standing resplendent in their perfection of form, but the greater number only sketched roughly in the marble by the first bold strokes of the sculptor's chisel. As we

look at the unfinished building, we do not harshly criticize the present state of incompleteness, but we rather have regard to the promise of future excellency. Such, too, must be our attitude in estimating the work of Keats. We must not look for absolute artistic perfection anywhere except in the more mature parts of his writings.

It is true that the body of his poetry, which can bear comparison with the ripe work of other poets, is very small indeed. But that he gave wonderful promise, there is no surer proof than the fact that he has been a deep well of inspiration for the poets who have followed. From the study of his poetry come countless suggestions for the creation of new and undreamed-of literary effects. There cannot be any doubt that his genius was one of the strongest and most original since Shakespeare.

## NATURAL SCIENCE ASSOCIATION.

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### *THE PRESENT COURSE OF STUDY AND METHODS OF EXAMINATION IN BOTANY AND ZOOLOGY.*

R. LEES, M.A., ST. THOMAS.

In considering the suitability of the course of study in Botany to the requirements of the high schools and collegiate institutes it will be necessary to look briefly at the objects to be attained by the study of Botany. Is this subject taught for its educational or developing power, for its utility, or, like some other things, simply because it is ornamental, satisfies a whim on the part of some, and makes employment for others? If the last reason, it is needless to discuss courses, and the sooner it is abolished the better. But that there are not better reasons for its having a place on the course of study is not honestly believed by anyone. Neither is it altogether, or even largely owing to its practical utility, that it is on the program. What then is the object of teaching Botany? I would say, first, to train to habits of observation in a true scientific sense. There is no other branch of study that cultivates better the habit of not only looking but seeing. But perhaps the most important part of the training is the cultivation of ability not only to see, but to think of what is seen, to compare and relate the things seen, to summarize and to draw conclusions. A second reason for teaching Botany is to cultivate a love for nature, and a delight in natural objects, to increase in this way the capacity for enjoyment of our pupils. The third purpose is the acquisition of knowledge, but this knowledge must be gained by experience, and it must be "knowledge classified," or science.

Are these objects attained by our teaching of Botany at present? How many of our pupils quit the course with any real interest in or love for nature? How many of them continue the study of their own accord? Not many I fear. As to training of the powers of observation and comparison, the results may be better, but yet are very defective. Is it not a fact that the teaching of Botany has fallen far short of accomplishing what might reasonably be expected from it? If this be so, why is it? There are several reasons.

1. The time is too limited. Most of the pupils who take Botany at present, and practically all who will take it in future, do so in the first form only. Their botanical study is confined to one year, and as they have no previous scientific training, they are not likely to acquire much love for nature or nature study is so brief a period.
2. The object for taking the subject on the part of nearly all is simply to acquire sufficient efficiency in it to pass an examination.
3. The work required for the examination is not the most suited for arousing interest, and cultivating a love of nature.

In the case of the first and second of these reasons it is perhaps impossible, as things are at present, to improve matters. If, however, it were possible to give two years in Botany, instead of one, to most of those who take the Form I. examination, it would be an improvement. When you feel that you must not stay too long over any one question, because there is a certain ground to be covered in a limited time, and when pupils have no further object in view than passing an examination it is a difficult matter to arouse interest, or secure satisfactory results.

It is, however, especially to the course of study that I intend to give my attention. If the course, outlined for Form I., were fully carried out, and emphasis given to the proper parts it would be comparatively unobjectionable, but as a matter of fact, in practice the only part of the course that receives any adequate share of proper attention is the study of the representatives of the fifteen orders named, with probably what is included under "drawing and description of plants, and their classification." The rest gets, in most cases, very little attention, and what it does get is made subordinate to the writing of descriptions of plants. In the selection of the orders for study some changes might profitably be made if that is still to constitute a part of the course. Why were the oaks put on? Specimens are not plentiful, are not easily secured when located, come at a time when other material is abundant, and they possess no special characters that make it important that they should be taken up. Again is there any special reason why the Coniferæ and the Graminæ should be on? They are both important as presenting special characteristics, and ought certainly to be on a course for more advanced pupils. But they are difficult, and cannot be profitably studied, except by pupils who have had considerable experience in manipulation. Besides there is abundance of other work for all the time. These three families, at least, might with profit be left off. Then why were the Labiatæ preferred to the Serophulariaceæ? The mints are of little use in teaching. They just begin to come into

bloom when school closes, and are gone too soon to be of use for fall work. Other changes might be suggested, but these will suffice for the present, as I am of opinion that it would be better to do away this part of the curriculum altogether.

With the ground covered by the other part of the course I have no particular fault to find. If it were made the prominent part of the teaching, and that teaching entirely of a practical character it would do fairly well. It is not, however. The part of the work that receives the bulk of the teacher's time and energy, is the description and classification of plants. This is apparent from the answers given to questions of a more general character on the papers of the last few years. The effective time for teaching Botany is only three or four months in each year, and that time is given almost wholly to plant description. In the winter months a little attention is given to morphology and the other parts, but it partakes more or less of the character of book botany, and is to that extent of little use.

The question arises: What is the reason for this state of affairs? To which I reply that there are several reasons. First the text book that is in use contains no work of a practical character, except plant description. It gives no assistance to pupils or teacher in any other part of the work. Second, it is easiest. It is a matter of very little difficulty, and even less utility, to write descriptions of plants in the loose, indefinite, and often inaccurate, way in which it is usually done—especially when all that the pupil does is to fill in a descriptive word or two in a formal schedule. I do not think that the best way to train pupils to make accurate observations, and to record them in concise and accurate language, is by setting them to make general descriptions as is usually done. The making of comparisons is the method by which all, and especially young people, learn, hence the first work, and indeed all the work for Form I. should be comparative. The third and most important reason for the state of affairs I have described is to be found in the character of the examination papers. During the past ten years they have given special prominence to plant descriptions. The matter is not so bad now as it was, but even yet the answers to questions of a general character on the papers give abundant evidence that, even with candidates for Junior Leaving, the description and identification of plants has received the largest share of the students' time and attention. If this were the only kind of practical work in Botany that can profitably be done it would be excusable, but it is not. Comparative organography and morphology, the study of fruits and seeds, the germination of seeds, and development of seedlings, besides

numerous other matters that might be mentioned, can all be studied in a practical manner with more profit than plant description.

This brings me to the question of examination to which some reference has already been made. That the present system of examination has been most unsatisfactory everyone knows. Besides its other defects it has had an injurious effect on the character of the teaching. To devise a perfect method of examination in science is a matter of great difficulty, even more so than to outline a suitable course of study. It is at the same time a matter of the utmost importance, for the examination comes to be a guide in the teaching, even more than the syllabus, owing to the fact that a majority of our pupils have the passing of an examination in view, and so pupils and teachers, as far as possible, make their work conform to what may be expected on the paper. It will thus appear that the examination is of even more importance than the course outlined, for the course actually followed will conform to the character of the papers, whatever may be put into or left out of the curriculum. What should be done? The teaching of Botany should be of a practical character if it is going to be taught at all. Can papers of a practical character be set, and have them different from those at present in fashion? An efficient practical test of a candidate's ability can be made under suitable conditions only, one of which is that the examiner himself, or a skilled representative be present to attend to the details. This is impossible where so large a number of candidates are writing at so many centres, and the difficulty is greatly increased by the fact that most of the presiding examiners are ignorant of the subject, and many of them grossly careless as to details. It would seem, in view of the fact that there is so much blundering and lack of uniformity with this part of the examination that greater stress should be laid on the other part, and less on the so-called practical part. A purely written examination cannot be set that will weed out those who have not done the work properly, without doing injustice to those who have. If the paper is purely practical, as our papers in Botany have been, it is sure to be limited in its scope, and objectionable in other ways. If not practical it will permit the passing of untrained or improperly trained pupils.

To sum up in regard to Form I. work, we require first a revised curriculum in which the prescribed families shall be different or dropped altogether. The rest of the course should receive more attention, and be given more prominence and importance. There should be comparative study of organs, rather than study of plants and efforts to make sort of pigeon-hole descriptions of them. The course in Botany for

the primary examination is practically the same as that first prescribed, when the subject was made part of the curriculum of studies fifteen years ago. Since then great progress has been made in Botanical study and investigation, as well as in methods of teaching, so that a course of study that was excellent, and well suited to the conditions that existed in 1882 might be very much out of date in 1897.

Second, the text-book now authorized belongs to the same period as the curriculum, and has served its time. With a new course of study we require a new text-book, there is at present none that is suited to the work we ought to be doing. There ought to be a book that, in addition to covering the ground, would form a practical guide to the teaching of the subject, as well as a hand-book for pupils. It should contain full instructions for each lesson as to the material to be used, and what to do with it. I think it may be safely said that a suitable text-book is just as necessary in Botany as in Physics or Chemistry, and its introduction would result in like saving of time and energy, as well as more systematic work in one case as in the other.

Third, we want a different style of examination paper. It is an undoubted principle that an examination paper on any subject ought to cover the ground prescribed. The questions ought to be fairly distributed over the whole, and no part should have undue prominence. To fulfil these conditions a paper must contain more than five or six questions. I would continue the giving of some practical work, if things can be so arranged as to ensure the proper carrying out of a few plain, simple instructions in regard thereto, I would not, however, as at present, insist on a whole plant being given, but would give parts of several plants, and ask for comparisons. The rest of the paper should consist of ten or a dozen questions that can be answered briefly. They should be well distributed, and of such a character as to give an advantage to pupils who have been in the woods, and have made use of their eyes when there.

As regards Forms III. and IV. much of what has been said applies with equal force to them. At present, however, things look as if this part of the course would prove a dead letter, as there are not likely to be any students taking the work. Girls will take French, German and Chemistry, and the boys will take Greek. If this is to last it is hardly worth while to discuss courses in Biology. It is hardly probable that it will last, though. A knowledge of Greek is not now of much importance, except to those who intend to pursue certain somewhat restricted lines of study. The day has not returned, as might be sup-

posed, from what we see, when all learning and good literature are in Greek, and the whim of requiring public school teachers to have a smattering of Greek, besides two other foreign languages, and at the same time permitting them to be ignorant of some of the most important phases of modern knowledge, is a piece of folly that surely will not be tolerated for long by a people who profess to be progressive. In the United States, and the most progressive countries of Europe, the tendency is to give greater prominence to the teaching and study of nature in both the primary and secondary schools. The science subjects are coming to be recognized as specially suited both to the conditions of our time, and for purposes of education. We hear much these days about the cost and extravagance of the high schools, and the uselessness of the education they impart. The proposition to convert some of them into technical schools is perhaps an indication that there is something in the demand for a change. If less of the time and energy of the schools were devoted to the teaching of French, German and Greek, and more to subjects that not only possess much greater educative value, but are of immensely greater practical utility, there would be less ground for complaint. Much is made of the unity of our educational system from the kindergarten to the university, but if, as seems to be the case, public school teachers are being improperly trained, and the high schools are not doing the best work they might do in the public interests, in order that their courses may conform to that of the universities, we are certainly paying too high a price for the unity.

As has already been said, notwithstanding the present retrograde movement it is probable that the teaching of science will soon come to have a more important place in the high schools, than it has yet had, for it is becoming apparent that, if the schools do not make their education conform more to the requirements of the age and the country, they will find it hard to give a reasonable excuse for their existence. When Biology does come to be properly recognized should the course for Forms III. and IV. be as it is at present? As outlined it requires, in addition to the work of Form I., a more extensive knowledge of the flora, and a knowledge of the cryptogams. The study of a flora is not the most profitable work in Botany, and descriptions of plants can afford a useful discipline up to a certain point only.

As to the cryptogams, the study of them as they have been taken up is of little use. The character of the questions asked has made it possible to cram up descriptions to be reproduced at examination, and the authorized text book has encouraged this by the character of its

treatment of the groups. In addition to the cryptogams the work in morphology should be continued, and made of a more scientific or technical character than for Form I. Some knowledge of minute structure should also be required, if any scheme can be devised for examining satisfactorily. As to the examination papers for these two forms, like those for Form I., they should cover the ground more fully, and not give undue prominence to any part. These are good reasons for leaving off the plant for identification for Form IV.

As to the course in Zoology I have little to add. The time is too limited for thorough or effective work. If students came to the prescribed course with some training from observation of the forms, habits, modes of life, and characteristics of living animals it would be a great advantage. As things are at present it is doubtful if the limited time available for this subject in a course of one year might not profitably be given to this kind of work, and the dissection done away with.

As to the examination there should be two papers for the Biology of Form IV., with two full periods. This year's arrangement is no improvement on that of last year, as the demand was really for more time, rather than more papers, and instead of being lengthened the time has been shortened.

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*MANUAL TRAINING, AND HOW TO INTRODUCE IT.*

R. H. COWLEY, M.A., OTTAWA.

Year by year it is becoming more apparent that the results of our school system are not commensurate with the energy and the money spent upon it. The general public incline to judge an educational course by its use. As a direct test utility had better be ruled out; as an ultimate test who will pronounce it inadequate? But the continuity and expansion of every civilizing agency requires that it shall be identified with high ends. It must have an ideal set before it, and it must show that it is achieving something in the line of this ideal. With what high purpose shall we associate the efforts of the Ontario School System since 1867? A close search will not reveal that the work of our schools has had an influential bearing on either developing the resources of our country, or stimulating the national spirit of its people. Nor is there due evidence that we have sought to produce a balance of physical and spiritual faculties. We have not specially emphasized character in education—neither can it be said that our schools have made the practical man of affairs their model. Everywhere and always subjects of study and methods of presentation have been more in view than either pupils or their destiny. If then we would estimate the apparent object of the Ontario School Course we must ascribe to it the rather impersonal ends of (1) information and (2) intellectual culture. We may take exception to the relative proportion of the information or the quality of the mental culture, but it would be idle to disparage either information or intellectual culture as objects of an educational system. We would only observe in passing that while these are two very worthy ends, they are far from being the chief ends of education. The Ontario School System has done a commendable work along these lines, but the things it has yet to achieve are greater still. While it is wise and, in its place, right to display the virtues and encouraging aspects of public education to those whose tax-money sustains our system, it is equally advisable and dutiful among ourselves to challenge and discuss all that we believe to be deficient or unprofitable. It is in this spirit alone that I charge our system—the public schools in particular—with the fault of having spent, and of still spending much time upon information that is

neither valuable nor educative. I charge them with frequent indulgence in exercises that are positively a hindrance to intellectual development. Not only so, but our public schools have not been sufficiently strong as agencies of higher ends than either facts or intellect. They are not doing what they ought to do and might do toward the upbuilding of strong, sturdy, manly character. If we regard the young men that the public schools turn out, we are at once confronted with a vision of weakness in many, many cases. After having the monopoly of a boy's time for five highly formative years of his life, is it too much to expect that they will send him out into the world with the cardinal elements of a successful character exemplified in his conduct? But too commonly he is not a strong character. Go to our centres of population, and consider the young men who are two or three years graduated from our public schools. What is the inspiration that moves them? Easy or genteel work—a fair salary and a good time. They are satisfied to fill positions of the merest routine, irrespective of their own higher development, while the moulding and constructing activities are left in the hands of a few. Mark their immoderate participation in sports and superficial pleasures. They do not value time—they do not value money. Without a sense of economy—a love for good reading—a spirit of self-improvement—you may count them on our streets by the score, their countenance void of manful purpose, and their every air stamping them as an incarnation of futility. If this were a picture of the average boy we turn out, I would admit that it is overdrawn; but that it is truly applicable to very many, will I think be admitted by all experienced and observant teachers. I do not charge our schools with being the active cause of such individuals. Their sin is a sin of *omission*. With the best possible school programme it would be difficult for *any* boy to spend five years in our schools, and then go out into the world as an aimless weak character.

In methods of teaching our public schools have made remarkable progress, but as regards matter we are trying to teach the things that our grandfathers tried to teach. Our energies have been concentrated on the "how," while we have done little to improve the "what." In the high schools we find the reverse. Until recently they had been almost proverbial for disregard of method, but they have devoted their power of criticism to the body of knowledge as set out in the curriculum. As a consequence, though there is much yet to be mended, the high schools have made intrinsic advance, while our public schools are essentially what they were in the days of Ryerson.

They have yet to be adapted to our needs. A young country needs originative and constructive men; a free country calls for independent and self-reliant citizens; a great country must have persistent and purposeful people. We have a young country—a free country—a country endowed with vast natural riches—a country with an honorable past—an encouraging present—a country whose future may be made great.

"Tis a maxim of the philosopher whose system leads the vanguard of modern thinkers, that all progress comes from the conflict of opposing forces. As inhabitants of the temperate zone we are naturally endowed with a due share of vital energy, for which we may find splendid use in grappling with the obstacles of our geographic and climatic conditions.

If we would enter into full possession of our national heritage our schools must do more to develop the self-reliant, originative, purposeful type of character. Our system of education is defective on the concrete, practical side. Along the line of the subjective studies there has been too much energy spent. The country is awakening to the fact that we need a sturdy, practical, aggressive type of young man with the genius and the skill to create a field of constructive activity for himself.

Much that is good in our public school course has been blended with much that is bad. A large share of the History, Grammar, Geography, etc., is of such a nature as to invite only an artificial interest at best. The teacher presents culled facts and organized knowledge to the pupil. But the boy must organize his own knowledge if he would enjoy it and grow strong.

Since a public school education is all that the great majority of our youth can get, the problem is how can we best employ them during the few years of their school life? We do not mean to contend that the subjects of the public school curriculum are not important. It is largely a question of relative importance. Formal grammar is not the most direct road to a correct use of the mother tongue, but a great part of the pupil's time and energy are devoted to it. Relatively this time and energy are unwisely spent. The Canadian History taught in the public schools, if you take the text-book and the entrance examination as the standard, aims at a knowledge which is an unwarranted stimulus to precocity. Physical geography, which is a truly practical and objective study, is slighted, while the driest facts of political geography are ground in. And so through the whole course it is safe—perfectly safe—to assert that the greater part of what is taught is not only rela-

tively of insignificant value, but it is a tax on valuable time that could be far more profitably spent. There is not a public school teacher in the land who has not often felt the strain of holding attention. Why should the teacher have to hold attention and keep every pupil at precisely the same thing at the same moment? A strong individual can be developed only through the agency of sustained, healthy, natural, spontaneous interest in suitable employment. Where the interest is forced and artificial, the consequence must be deterioration in place of development. We are working against nature when we find that interest is hard to arouse, and harder to hold. We are working against nature where we find that pupils forget—when constant reiteration and grind and drill are necessary to rivet the so-called important facts. Why should anything be forgotten, if it has once been brought home to the mind? Nature protects the mind against that which is uninteresting—against that which the mind is not seeking, for what it does not want it will throw off.

Undoubtedly there is a knowledge that has to be acquired by inculcation, but this class of knowledge should be left to the free choice and self-imposed effort of the pupil. The only kind of knowledge that it is legitimate for the teacher to use is that which seeks the development of the pupil through his own activity. We cannot educate where we do not create a motive for action. Interest is the condition that renders possible a healthy reception of any fact. Nine boys out of ten naturally love physical activity—contact with the external world—rational constructive pursuits. It is just at this point that Manual Training comes in. As the hand may be regarded as the symbol of "doing," so "Manual Training" may be accepted as the type of all processes of education which seek to develop through self-expression—all teaching that brings the student into a vital contact with things. It is unfortunate that Manual Training, in its literal sense, has been made the hobby of faddists who, in one way or another, have almost assured us that the development of the hand in strength, dexterity, delicacy, and responsiveness would certainly introduce that universal standard of perfection which we usually associate with a millenial state.

If we turn to the more inclusive term "Industrial Training" we find it has suffered in prestige by associations with the house of correction, and the pursuits of a mere artisan life. On the principle of using the part for the whole, the term Manual Training may be accepted until a more presentive and comprehensive name for the new education announces itself.

The purely subjective studies have held sway so long in our schools

that nothing short of a definite plan of action, backed up by courage, persistence, tact, and enthusiasm, will suffice to effect a transition from the old to the new. Where shall the thin end of the wedge be inserted? Where shall we set the little leaven that is to leaven the whole lump? Already the wedge has been inserted, and the cleavage started. Already the leaven has been working through the practical side of our science departments. But it will not be possible to introduce Manual Training into the Public Schools without giving teachers the requisite knowledge, and a certain amount of practical skill. The knowledge of the teachers, both professional and non-professional, must be made specific. The Science option of the High Schools might be prescribed as part of the course which every Manual Training teacher shall be required to take. This course should extend in Science, at least, as far as the Junior Leaving Standard. It should be guaranteed practical in every topic of the syllabus.

There is no other place so suitable as a centre of propagation for Manual Training as the Science Department of the High School. But there should be a workshop added to each department, wherein every student will be required to make, as far as possible, the apparatus through which he is to gain his knowledge of principles and laws. But if this kind of work is to grow it must be encouraged. At present it certainly is not encouraged by the mode of testing results at the Departmental Examinations. If every school inspector were required to be a Specialist in Science we might have a person in each locality who could efficiently conduct a practical examination, under departmental direction. The absence of such qualification among inspectors is a disadvantage to our science departments, even as the examinations are now managed; and it is hard to see how the existing style of Science Examination can be much improved, until each school has within reach an examiner who has a thoroughly practical knowledge of the work of our Science Departments. Not only will the mode of examining need improvement, but a satisfactory preparation for the introduction of Manual Training will require some change in the Science Course of the High Schools. The superficial smattering of physical principles that is now prescribed for the Primary Course ought to be supplanted by a narrower, more definite course. It would have been more consistent with a regard for the natural principles of the growth of knowledge, as well as a correct application of the inductive method, if a single elementary course in heat or electricity, or properties of matter or hydrostatics had been chosen. In any one of these lines there would have been more true

education than in the entire course that is now attempted in the primary forms.

Another desirable change would be the commencement of the Physical Science in the lowest forms of the High Schools, so that the practical training of the future teachers might be made more thorough, systematic and substantial. Where the experiments are to be performed by the pupils themselves a great deal of time is needed. If, in addition to doing the experiments, they should be required to make their apparatus—the time is now altogether inadequate for the encouragement of this highly desirable training. With a careful primary training the student would derive great benefit from a course such as that prescribed in our authorized text-book on Physics, Part II.

The work of our Science Departments is directly in line with that which is called Manual Training. It is an advanced embodiment of the principles that underlie the kindergartens. But if certain principles of education are good, let us see to it that they become as widespread as possible. An intermittent application cannot achieve much. There is a great hiatus between the objective instruction of the kindergarten and that of the primary form in the High Schools. A little manual training added to the third and fourth classes of the public schools would signify a step forward. But that is not what we seek. The gulf between kindergarten and third class should also be bridged, and we should have no interruption in the sequence of Kindergarten, Manual Training and Science Department from the beginning of school life to the doors of the University. Then only will the Science Department be placed upon the same vantage ground as English and Mathematics, and then only will the full benefit of culture through practical education become apparent.

*SOLUTIONS.*

S. SILCOX, B.A., B.PAED., COLLINGWOOD.

While science is striving to introduce a simpler system of weights and measures, and is advancing towards perfection by unifying what was previously unrelated, there lies within her own demesne great masses of useless rubbish which would better be cleared away before she ventures forth to look for defects, sometimes of microscopic dimensions, in foreign fields. I refer to the unnecessary multiplication of technical terms for describing different aspects of the same phenomenon. Without particularizing outside the present subject, the terms in use to describe "solution" will illustrate the general confusion which arises by the use of these different names. Solution, diffusion, occlusion, amalgam, alloy, mixture, osmosis, absorption, etc., present a very formidable front to the beginner, or even to the more advanced student of physical science.

In introducing the subject, therefore, I propose a reduction of all these terms to the simple word "solution," trusting that the facts, hereinafter stated, will justify the simplification. Whether the solvent is in the solvent in a molar, molecular, ionic or any other state, may be neglected just now, as evidence may be adduced to show that perhaps all these conditions occur in what are generally recognized as simple solutions. Discarding then the actual condition of the solvend in the solvent, we have these possible combinations:—

1. Solid in liquid, *e.g.*, sugar in water; zinc in mercury.
2. Solid in gas, *e.g.*, sublimation of iodine, and, perhaps, dust in air.
3. Solid in solid, *e.g.*, alloys, silver and copper.
4. Liquid in solid, *e.g.*, water in snow; perhaps water of crystallization.
5. Liquid in gas, *e.g.*, water vapor in air.
6. Liquid in liquid, *e.g.*, alcohol in water.
7. Gas in liquid, *e.g.*, ammonia in water.
8. Gas in solid, *e.g.*, ammonia in charcoal; hydrogen in palladium.
9. Gas in gas, *e.g.*, any two gases.

With the exception of (4), (5) and perhaps (8), modern writers on solutions admit these combinations. Even (8) is admitted as similar to true solution.

The forces, as known, acting on any pair as stated, are:—Cohesion adhesion, gravity, adhesion of vessel for substance in contact, original

motion of molecules, especially in gases, affinity of atoms for each other (in the molecule more particularly), electric forces (not definitely known). Of these cohesion and affinity of atoms prevent solution ; adhesion and molecular motion aid it. Gravity may aid or prevent. Whatever is the cause of the solution of one substance in another, when it has taken place, the solvend is doubtless in a state of motion, similar to the motion of molecules in a gas, for solutions have been proven to exhibit the same laws as gases, *i.e.*, Boyle's, Avogadro's, and perhaps Charles'. Thus Boyle's law, applied to solutions, is :—The solution pressure is inversely proportional to the volume. This is proven by Pfeffer's results :—

A one per cent. solution of sugar gives 538 mm. pressure ; a two per cent. solution of sugar gives 1,016 mm. pressure ; a 2.74 per cent. solution of sugar gives 1,513 mm. pressure ; a four per cent. solution of sugar gives 2,082 mm. pressure ; a six per cent. solution of sugar gives 3,075 mm. pressure.

This pressure may be calculated just as in gases. Thus, take a one per cent. solution of sugar, *i.e.*, one gram in a 100 grams of water.

The molecular weight is 342.

A one per cent. solution =  $\frac{1}{342}$  of a gram-molecule in one litre. A volume of hydrogen or any other gas, containing  $\frac{1}{342}$  of a gram-molecule in one litre would exert a pressure of  $760 \times \frac{1}{342} \times 22.32 \times \frac{279}{273} = 508$  mm. at 6.8 degrees C.

Pfeffer found by experiment 505 mm. pressure at 6.8 degrees C.

Avogadro's Law, as applied to solutions, is :—The solution pressure of all solutions containing the same number of gram-molecules (molecular weight in grams) in a given volume is the same. De Wries has worked out this result. But for electrolytes the solution pressure is greater ; double for di-ionic molecules ; treble for tri-ionic molecules. Figures for these will be quoted afterwards.

Charles' Law, as applied to solutions, is "solution pressure increases in direct proportion to the absolute temperature." Ganot's "Physics," contains this unmodified statement. Other writers are not so positive:

Whenever, therefore, two or more substances form a homogeneous mixture, which acts in accord with these laws, we may call it solution. Solids in liquids, gases in liquids, and in solids, amalgams, alloys, etc., do this, and all are therefore true solutions.

Whatever is the cause of solution, the evidence seems quite conclusive that *in* solution the solvend is in a molecular state in non-electrolytes and a dissociated molecular (ionic) state in electrolytes. This is shown by the following data :—

One gram-molecule in 100 grams of water (calculated from results obtained from dilute solutions), of sugar, gives a solution pressure of 505 mm.—depression of freezing point ..... 18.5°  
 Salt, 900 " — " " " ..... 35.1°

Potass. sulphate, 1,092 minum—depression of freezing point. 38.2°

So also in lowering of vapor pressure.

|  |           |
|--|-----------|
| Potassium chloride (one gram in 100 grams) .....     | 24.4 mm.  |
| Sodium      "      "      "      "      .....        | 25.2 "    |
| Potash      "      "      "      "      .....        | 29.5 "    |
| Aluminium chloride "      "      "      "      ..... | 61.0 "    |
| Calcium      "      "      "      "      .....       | 39.8 "    |
| Barium      "      "      "      "      .....        | 36.7 "    |
| Succinic acid      "      "      "      "      ..... | 12.4 "    |
| Cibric      "      "      "      "      .....        | 15      " |
| Lactic      "      "      "      "      .....        | 12.4 "    |

The three latter agree well with theory and are therefore taken as normal. The others are explained by assuming dissociation or "ionisation." Furthermore, the conducting power of solutions is proportional to the concentration at great dilution, the solution being an electrolyte. Again, an electrolyte cannot bear the least strain without decomposition. These facts are sufficient to give some ground for the dissociation theory, which holds that electrolytes in solution are more or less completely dissociated into "ions." Thus salt is dissociated into sodium and chlorine, "ions," having different properties to atoms and yet not so closely related as in molecules. To account for their greater solution pressure, depression of freezing point and lowering of vapor pressure, each ion is assumed to have the same effect as a molecule of a non-electrolyte. It is important to notice that non-electrolytes are non-conductors, and, conversely, non-conductors are non-electrolytes. Water is a non-conductor and therefore a non-electrolyte, and, *beyond a doubt*, the so-called electrolysis of water is a secondary chemical action, the electrolyte being the acid present.

This leads to an entirely new theory of electrolysis. The electrolyte *in solution* (or in a state of fusion) is already dissociated into its ions. All that the electrodes do is to attract these and set them free. A very small current will do this if polarization of the electrodes is prevented. Hence the answer to the question "Can a single gravity cell be used to decompose water?" is, "No cell, however powerful, can decompose water, but the smallest possible current can decompose sulphuric acid *in solution in water*, and secondarily, the water, by chemical decomposition. Thus di-ionic molecules exert twice as great, and tri-ionic molecules three times as great, a solution pressure as a non-electrolyte.

It is not my purpose, however, to discuss further these theories, which are fully developed in Ostwald's "Theory of Solutions;" Whetham's "Solution and Electrolysis," and, less fully, in Barker's and Ganot's "Physics," to which I must leave you to refer for further particulars. I wish, rather, to point out some consequences, and make some explanations regarding common phenomena, which, so far as I know, are original and directly opposed to the generally accepted, stereotyped views.

An attempt was made to establish a relationship between capillarity and solution. Any attempt to determine the concentration of the solution drawn up by a capillary tube gave negative results. Possibly a tube could be made small enough to effect some separation in certain solutions. Despretz cooled water to twenty degrees C. in capillary tubes without freezing. This is analagous to depression of freezing point in solutions. Whetham gives the results of conductivity of films. They are better conductors than the solution in mass, up to three per cent. concentration. Possibly this is due to greater concentration in the surface layer of the solvent. A somewhat similar contrivance to very small capillary tubes is a copper ferrocyanide membrane which allows only pure water to pass through. This can be due only to the inability of the solvend molecules to pass through the fine pores. Air acts in this way to most substances in solution. It is an impermeable membrane to the solvend but not to the solvent. Therefore I would explain evaporation as a case of solution, and water vapor is held in the air, or ether, just as salt is held in solution in water, but salt is not soluble in air. So all volatile fluids are soluble in air or ether.

The decolorizing power of carbon has always been a mystery, hitherto explained by a guess, that the oxygen condensed in its pores is the active agent in destroying color.\* If so, the filtrate should still answer to the general tests for the salt filtered. But *it does not*. I have filtered the following compounds in solution through animal charcoal (wood charcoal was also used and found effective), and tested the filtrates by the usual tests without finding anything in them:—

- (a) Potass. permanganate.
- (b) Iodine in aqueous solution.
- (c) Sulphocyanide of iron.
- (d) Cupric ammonium.
- (e) Cupric nitrate.
- (f) Potass. ferrocyanide (very dilute).
- (g) Alum—astringent taste removed entirely.

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\*Vide Barker's Physics, p. 184; H. S. Physical Science, p. 140.

Other solutions gave evidence of much less concentration, though solutions not colored are hard to test, because the solution must be very dilute before filtering.

I offer this explanation : Carbon absorbs gases readily. Substances in solution are like gases, and in passing through the charcoal are simply *dissolved* by it from the original solvent, just as chloroform dissolves iodine from aqueous solution. Thus a charcoal filter soon becomes " saturated " with the substances it dissolves.

In order to prove definitely that the oxygen has nothing to do with the decolorizing action, I heated charcoal red hot, cooled in carbon dioxide gas, and filtered cupric ammonium solution. It was decolorized as usual.

Following this idea of a solid dissolving a gas, I have concluded that in a storage cell, hydrogen is dissolved in the negative lead electrode. Many books at my command explain the voltage of a storage cell as the difference in potential between lead and lead peroxide. Whether this is satisfactory or not, I shall let the following experiments decide :—

|  |                                       |
|--|---------------------------------------|
| <b>EXPERIMENT 1.</b> —Stored two lead plates.....  | Deflection 90°.                       |
| Heated the hydrogen plate.....   | " 15°.                                |
| Heated the oxygen.....   | " 24°.                                |
| <b>EXPERIMENT 2.</b> —Stored lead plates.....  | " 90°.                                |
| Placed hydrogen plate under the receiver<br>of an air pump and exhausted.....  | " 60°.                                |
| <b>EXPERIMENT 3.</b> —Repeated Experiment 2.....   | " 30°.                                |
| <b>EXPERIMENT 4.</b> —Deflection produced by hydrogen elec-<br>trode and <i>pure</i> lead plate.....   | 5°.<br>(Hydrogen electrode-positive.) |
| <b>EXPERIMENT 5.</b> —Placed lead plate for half-an-hour in zinc<br>and sulphuric acid so as to absorb, if<br>possible, nascent hydrogen. Deflection<br>with lead peroxide plate.....  | 75°.                                  |
| <b>EXPERIMENT 6.</b> —Amalgamated a lead plate and placed in<br>Hydrogen. Deflection with lead per-<br>oxide.....  | 80°.                                  |
| Before being placed in hydrogen.....   | 30°.                                  |
| Pure lead to lead peroxide gave.....   | 30°.                                  |
| <b>EXPERIMENT 7.</b> —Placed the hydrogen electrode in chlorine<br>(a) for fifteen minutes, (b) for five<br>hours. (a) showed no appreciable loss<br>of potential. (b) showed almost com-<br>plete loss of potential to lead peroxide. |                                       |

**NOTE.**—Plates were washed thoroughly in water each time.

I conclude that the hydrogen is a very important factor in determining the potential, and it is probably *dissolved* in the lead. When the current is passed first in one direction through a storage cell and then in the opposite direction, a much better storage cell is formed. This has been explained as due to the large surface formed on the negative electrode by first forming lead peroxide, and then reducing it, thus leaving finely divided lead. I venture to suggest that it is due either to a more complete *solution* of hydrogen in the lead or to the formation of an unstable hydride, such as hydrogen forms with palladium and perhaps with platinum. That the hydrogen is not merely condensed on the surface, as molecular gas, seems to be proven by the fact that a lead plate heated and cooled in hydrogen is no more positive to lead peroxide than ordinary lead. At least, my experiments gave that result.

If solutions are "ionic," as is claimed by the advocates of the "dissociation theory," then such gases as oxygen, chlorine, etc., should be more active in solution than as gases. This is the case. In fact, oxidation never occurs, according to Richter, except in the presence of moisture. This has been explained as due to formation of hydrogen peroxide or ozone. May it not be explained by simply assuming an "ionic" state of the oxygen in solution in water or water vapor? I think so. Let the facts give evidence.

**EXPERIMENT 1.**—Placed a clean iron shaving in water in an open test tube.  
Iron rusted well in twelve hours.

**EXPERIMENT 2.**—Placed another clean shaving in water, which had been boiled to expel dissolved oxygen, and sealed tight.  
The iron did not rust at all, even in a week's time.

**EXPERIMENT 3.**—Placed iron in alcohol containing dissolved oxygen. It rusted in half-an-hour quite noticeably, and in less than twenty-four hours was thickly coated with rust, while iron in absolute alcohol, without oxygen passed into it, showed very little change in twenty-four hours, or even in a week.

**EXPERIMENT 4.**—Placed antimony in a solution of sulphur in carbon bisulphide. The orange yellow sulphide was formed.

Solution therefore makes some substances more active chemically, (probably all substances). The bleaching power of chlorine is doubtless due to an ionic state induced by the water present, and not, as is generally stated, to indirect *oxidation* through the action of chlorine on the water. The slowness of the action of chlorine on water, even in strong sunlight, would go to prove that in diffused daylight very little action of this kind would take place, and bleaching may be

effected in the dark. The action of chlorine water on gold leaf, as compared with chlorine in a nascent state, shows a close relation between the state in solution and the atomic.

The solvent is important, too. Thus, mercuric chloride in water is poisonous to anthrax spores; in alcohol it is not. This is explained by the absence of mercury "ions" in the latter, while present in the former. Perhaps some so-called catalytic actions may be explained by solution.

In conclusion, is it not justifiable to ask, *if solution or dissociation by heat does not precede all chemical action?* Or, where this is not necessary, as in the action of metals and acids, *are the metals monoatomic?* Mercury, zinc and cadmium are. Probably the other metals, which react with acids, are also. Perhaps absolutely pure acids (anhydrous) would not react with metals. We know that absolutely pure zinc does not react with acids. Perhaps the first effect of the electric forces is to bring about solution. Is nitrogen, in solution, active? Is oxygen in solution radically different from ozone in solution? Would aeration of the blood be possible without solution? Is this not the reason why fish cannot breathe in air. Can any separation be effected in a solution by centrifugal force?

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*MINERALOGY AS A HIGH SCHOOL SUBJECT.*

W. G. MILLER, M.A., SCHOOL OF MINING, KINGSTON.

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While Ontario has heretofore been looked on chiefly as an agricultural country, it is certain that in the future mining will employ a large part of the population. Our mineral-bearing rocks cover a vast extent of territory, and our mineral industry can scarcely be said to be more than in its earliest infancy. There will be work for prospectors and explorers in this province for many years. It is therefore desirable that the widest opportunities be afforded the youth of the land for gaining some knowledge of mineralogy and geology in the schools of their own districts. Many men willingly take up the study of these sciences under difficulties, and others ought to be given encouragement to enter the work.

I do not think anyone will dispute the statement that mineralogy and geology, from the bearing they have on mining and agriculture, are the most important subjects, from the economic point of view, which can be taught in our schools. Their right for a place on the curriculum is not based, however, only on their economic value. If such were the case, I would consider it doubtful if they should be recognized as High School subjects. They are as suitable subjects, when viewed from any other educational standpoint, as are the other sciences. Taking into consideration, then, both their economic value and educational importance, it is surprising that they are not already on the curriculum. If we examine lists of subjects of study in other countries we find that these sciences occupy a prominent place. One is especially struck with the attention given to the study of mineralogy in the schools of that country, Germany, which is generally admitted to lead the world, and to serve as a model in most branches of education from infants' schools to universities.

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Prof. Nies, of Mainz, says that in general the desire for mineralogy and geology in the schools of Germany is increasing.

Mineralogy and geology are given a prominent place on the curriculums of many of the schools in the United States. Geology has lately been selected as a subject of study in the schools of New York and Chicago. The establishment of a great university in the latter city

has no doubt reacted on all branches of education, from the lowest to the highest, and the curriculums are being brought up to date.

In a letter I recently received from Prof. T. C. Chamberlain, of the University of Chicago, formerly president of the University of Wisconsin, he says:—

"It seems to me that this move (referring to the teaching of mineralogy and geology in the secondary schools) is one of radical importance, since the elevation and vitalization of geographic instruction is largely dependent upon the study of these subjects in the high schools. Nearly all of the teachers in primary and grammar schools secure such education as they have in the high schools, and unless they secure some knowledge of geology, or at least of physiography, they are unable to teach geography on its physical side, at least in any inspiring, thorough-going way.

" . . . I would be quite content with a thorough-going course in physiography if the soul of geology were put into it, but that is rather a question of mode than of substance.

" . . . I may say that by a recent change in the curriculum of the Chicago schools, the first year in the science line is devoted to physiography, and in the fourth year there is provision made for a course in geology.

" . . . I think that these two instances (New York and Chicago) represent the general movement, which is likely to become quite universal at an early date. I think, therefore, that in urging that a larger place be given these subjects, you are quite in touch with the current movement in the United States."

In a letter which I received not long ago from Prof. Carter, of the Philadelphia High School, he confirms this last statement of Prof. Chamberlain's with regard to the current movement in the United States.

In Massachusetts and other States, which maintain a high standard of efficiency in educational matters, we find that mineralogy and geology are given a place among other subjects of instruction in the schools.

Then, if we examine the curriculums of the provinces of Canada, we find that these subjects are taught in many of the schools. In fact, Ontario, the greatest of the provinces, and one which must in the future depend to a very large extent for her progress on the development of her mineral resources, seems to be the most backward in the encouragement which she offers to the study of mineralogy in schools below the rank of universities.

A number of High School students in this province have given up their work to take the short courses in the mining schools. There should be some opportunity for their getting this instruction in their own districts. If the students who enter the universities and mining schools of the province had studied mineralogy before entering they would be able to make much better use of their time during the four years they are in attendance. Too much time is taken up in our universities in teaching the elements of many subjects. This work could be better done in the secondary schools. If a student begins a subject, such as a language, or a science, after entering college, he does so usually under a great disadvantage. The university instructors naturally prefer to devote most of their time to the advanced students, and in some cases they are not so much teachers as lecturers. They can, moreover, employ their time to much greater advantage on the more advanced part of the work, and should not be expected to duplicate the work of the preparatory schools.

There is no reason why the study of mineralogy should not be taken up at once in the High Schools and Collegiate Institutes, except, perhaps, the difficulty of making room for it on the already crowded curriculum. However, where there is a will there is a way, and I have no doubt that those engaged in giving instruction in science in the schools can suggest means of making a place for it. There can be no objection on the score that the science teachers are not qualified to teach the subject, as I believe that all science specialists are competent to do so. Many of them have made a specialty of the subject in their university courses. The outlay for specimens and material for study would be small. Many of the schools are already supplied with suitable collections of minerals, and those which are not can obtain them at small cost.

The study of mineralogy could be taken up in connection with chemistry. Some of the more theoretical parts of the latter subject might be dispensed with. If these two subjects were taken up together I believe that chemistry could be made much more interesting to many pupils. Instead of the pupil being simply told that sulphur, *e.g.*, is found in pyrites, or that gold is commonly found in quartz, or that carbon dioxide is a constituent of calcite and other minerals, he should be shown specimens of the substances referred to, and could apply simple tests for the determination of the minerals by means of the mouth blowpipe, or other easy methods. Minerals appeal to almost everyone, from their beauty, and from the manner in which they are found in the rocks. There is probably more of the

mysterious, if we may so call it, about them than about most other natural objects, which adds to the interest taken in them. There are very few of us, natives of this continent, at least, for whom the economic has not a fascination, try to disguise it as we may. If there is a chance for us to learn something of some subject from which we may secure wealth we have our interest aroused. As an instance of this let us look at the people around us during a time of mining excitement. Members of all classes in the community are at the present time interested in minerals. Men of all callings are constantly telling one that they wish they knew something of minerals. They say mineralogy must be a very interesting study. I think it may safely be said that the study is one of the most fascinating, to say the least, which any of us Americans, including, of course, Canadians, can take up. I believe that, as a people, we are better adapted, that the spirit of the age impels us more, to the study of subjects which have some practical bearing than to those which are more abstract in character. We may wish that this were not the case, but we are so constituted mentally, that we are powerless to resist the influence of the times.

Looked at in another light this tendency among us to pursue the practical, this eager desire for wealth, does not appear such a bad thing after all. It is but a natural phase in the development of young nations such as our own. In order that the fine arts and pure science may flourish among us to the best advantage it is necessary that the nation be wealthy. In order to gain this wealth it is necessary that we make use of our natural resources of soil, forest and mine. But in order to make use of them the people as a whole have to take up the work. Hence, before the country can rear a race of philosophers poets and artists, it must have had its skilled artisans, miners and explorers. A year or two ago I said to a distinguished German scientist that we in America labored under a disadvantage in the pursuit of pure science, in that great demands were made on us for discoveries in the applied. He said that his country had passed through that stage; that most German scientists were not now offered opportunities for acquiring sudden wealth by making some happy discovery in virgin territory, and that there was little temptation offered to them in most of the sciences to desert the pure for the applied. I believe that those subjects which have a practical bearing will long be the most popular among us on this continent.

Having offered a suggestion as to a place for mineralogy on the curriculum, I may say that it appears to me the study of geology could profitably be taken up in connection with that of geography.

This latter subject is, in many cases—I speak from experience—one of the most poorly taught in the schools. It is now, I believe, better taught than formerly, owing to more stress being laid on its relation to geology. Much remains, however, to be desired in the instruction in this subject, and this can be secured by giving geology a place among the studies.

While I have spoken only with reference to the teaching of mineralogy and geology in the High Schools, I believe that they could be taught successfully in the Public Schools, from knowing what is done with them in schools of this grade in other countries. Some years ago I met a Swedish workman, who surprised me by the knowledge he had of these subjects, and I was unable to understand how he had been able to acquire such exact and valuable information. He explained to me, however, that many of the primary schools in his native country had small collections of the common minerals, and that the children were taught a few of their characteristics, and easy methods of identifying them, and said that in after years, if they lived in a mineral district, it was quite easy for them to increase their knowledge and to employ it as a source of pleasure and sometimes of profit.

In Algoma I had the opportunity of learning more concerning the value of a pupil being given some instruction in this subject in elementary schools. A little girl astonished me by the knowledge she had of common minerals and rocks, and the interest she took in them. I afterwards learned that she had attended a private school in Scotland, in which the pupils were encouraged to collect specimens, and were taught something of their characters. Back in the rocky wilds of Algoma, I met a settler who seemed to be more contented with his lot, and more enthusiastic over his surroundings, than most of his fellows. I found that he, too, when a youth, had enjoyed the benefit of a short course in geology in Scotland. He had increased his knowledge in after years, and looked on the rocks about his backwoods home as subjects of interest and of instruction, while his neighbors were inclined to wish that the granite hills were dissolved, and buried deep beneath the soil.

Many teachers have told me that they have found mineralogy and geology most suitable subjects for arousing the interest of junior pupils, and considered that they could be taught with profit in our public schools. But, as matters stand, these subjects in this province have not even a place in the High Schools.

I have suggested that mineralogy could be taken up in connection

with chemistry, and geology with geography. I would like to see these subjects taught in many of the schools of the province, both on account of their great importance in developing our vast natural resources, and on account of their great value from other educational points of view. If it is not considered possible to have instruction given in them in many schools, they ought to be taken up at least, and at once, in the schools situated in mineral districts, such as Ottawa, Perth, Renfrew, Pembroke, Madoc, Peterboro, Port Arthur and others. Let it be optional with the boards of trustees of such schools whether mineralogy and geology shall be taught to the pupils under their charge. If this were done I am confident that they would soon become in many schools as popular as any other subjects on the curriculum.

I consider that the greatest defect in our educational system at present is that altogether too little is done for those who wish to acquire technical knowledge. It is true we have two institutions which may be called technical colleges, but the instruction given in them is of an advanced character, corresponding to university work in pure science. It is likely we shall soon have technical schools of a lower grade in some of the larger towns and cities. At present, it is true, our High Schools offer a considerable variety of courses, but those sciences which are the most important, from the economic point of view, in this province, and are as valuable as any others as a means of culture, are unrecognized by their curriculum.

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## CLASSICAL ASSOCIATION.

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### *HORACE AND MODERN POETRY.*

H. BONIS, B.A., VIENNA.

In comparing the works of Horace and those of modern poets (by which I mean those who have lived since the revival of learning), one of the questions which meet us at the outset of the inquiry is, how far is modern literature original, and in what degree is it a reproduction of the common stock of ideas handed down to us from the ancients? Poetry, like civilization, in many cases, owes much to anterior forms and phases, and to disentangle the new from the old, and allot to each its proper share of honor, is in such cases no easy task. It shall be my aim in this paper to show, first, the indebtedness of modern poetry to our author, in regard to both thought and style, and secondly, what advances the modern poets and critics have made in their practice and conceptions of the art, beyond the stage reached by Horace.

That poetry is largely an imitative art, few will be found at this day to deny. It is not meant by this assertion to deny the *nascitur, non fit* theory of the origin of poetry, but merely to add thereto the equally palpable postulate, that, given as a primary and essential qualification for becoming a poet the poetic nature, the development of the form and style in which this poetic instinct shall find its expression, depends much on its environment—on the models which the budding poet sets before him, whether these be the great masters of his own or of any other age. Hence we see different fashions prevailing in poetry at different times—Virgil, great poet as he was, slavishly imitating, even in the matter of details, his Greek master, Homer; and again, in England, toward the close of the last century, a swarm of poets, each more enthusiastic than the other in rejecting the methods and subjects of the classical school for the newly-discovered “nature” methods and subjects. It should not be surprising, then, to find that a poet possessing such reputation and merit as Horace, should have exerted no inconsiderable influence on the poetry of modern nations, among whom his works have been studied for centuries as those of one of the masters of the art.

The influence exercised by Horace on modern poetry may be traced to two sources: the one source of influence being the direct teaching on the nature and art of poetry which is found in his epistles; the other, the indirect, but perhaps equally potent, source being the poetic excellences of his verses themselves.

A didactic work, which owes much to Horace's epistles, particularly to the third, commonly known as the "Ars Poetica" is known as "L'Art Poétique" by Boileau, the famous French poet of the seventeenth century. This poem is usually considered to be the fullest and most complete exposition of the subject of which it treats to be found in verse, and has exercised a very considerable influence on modern poetry. "L'Art Poétique" is a poem of about twelve hundred lines, or nearly twice the length of the "Ars Poetica" and was published in the year 1674. How much it owes to the latter work, in addition to its name, may be seen from the following brief abstract of the work:—

In the first of the four cantos into which he divides his poem Boileau begins by admonishing all who do not feel the *divine afflatus* to refrain from attempting to write poetry—a piece of advice which reminds us strongly of Horace's animadversions on *mediocre* poets in the "Ars Poetica." He says that even true poets have different capabilities, and should choose their subjects accordingly. He warns against allowing the sense to be sacrificed to the exigencies of the metre, or of the rhyme. Tediousness must be avoided, and yet the writer must avoid falling into the opposite extreme of too great conciseness. Listen to Horace on this point: *Quidquid praecepies, esto breris*, and *Brevis esse labore, obscurus fio*. Poems must have variety; Horace feared that the danger lay in the opposite direction, and speaks of it in the opening lines of his "Ars Poetica"; *Purpureus, late qui splendeat, unus et alter assuitur pannus*.

The poet must avoid vulgarity—the *immunda ignominiosa que dicta* which Horace warns against. He must attend to the melody. As to expression, he counsels the poet to first acquire a thorough knowledge of his subject, when words will not fail him. Compare on this point Horace's *Cui lecta potenter erit, res nec facundia deseret hunc, nec lucidus ordo*. He urges care and correction—*labor lime*—in the composition of poems. Horace, addressing the brothers Piso, has the following on this point: *Vos, O Pompilius sanguis, carmen reprehendite quod non multa dies et multa litura co-ercuit*. He speaks of the necessity for unity and harmony, closely imitating Horace in his precept, *Denique sit quodvis, simplex duntaxat et unum*. He concludes the canto with the advice to seek wise critics, and to listen

to their opinions. But want of space forbids us following him through the remaining three cantos of this poem in which the proofs of his imitation of Horace are quite as numerous and as plain as in the first. Suffice it to say that much of the poem is taken *verbatim* from the "Ars Poetica" while many other parts of it are amplifications of passages in Horace that deal very briefly with particular parts of the subject.

But Boileau's imitation of Horace is not confined to this poem. His other works bear evidence to the influence of the same author. In addition to "Ars Poetica" he has satires, epistles and odes, modelled in each case on the similar productions of Horace.

Another modern poet who has closely imitated Horace is the English writer, Alexander Pope. Pope was a professed admirer and imitator of Horace, and his genius in many respects resembled that of the Roman poet. Throughout his works we notice the same scrupulous regard for the mechanical part—the finish—of his verses, that distinguishes Horace. Such thoughts as he has of a poetic nature are faultlessly expressed in a flowing, natural, easy style; the result, as he tells us himself, of "art, not chance"—in other words of Horace's *labor limeæ*. Many of his couplets have become household words for the expression of—to quote from his "Essay on Criticism"—"what oft was thought, but ne'er so well expressed." In this respect, again, he reminds us of Horace; for where do we find in the classics more felicitous expressions for those "touches of nature which make the whole world kin" than in that poet? Yet the Roman poet had the advantage of his English disciple in point of genuine poetic ability. Though Pope might equal, or even excel, his master in felicity of expression, and in the ability to make charming miniatures in verse of the common-places of the philosophy of life, he lacked one very important qualification for a poet—poetic feeling. Taine says, in speaking of him: "A great writer is a man who, having passions, knows his dictionary and grammar! Pope thoroughly knew his dictionary and his grammar, but stopped there."

Yet, none the less, English poetry owes much to Pope. His "Essay on Criticism," written in 1709, when its author was but twenty-one, marked him as a writer who had mastered the technique of poetry better than many a reputable poet of twice the age. The work was highly praised by Addison, then the arch-critic among British literati, and at once established the position of its author as one of the leading poets of the time. Although ostensibly a collection of rules for the guidance of critics, the essay gives, indirectly, much information

of a didactic nature on the subject of poetry, and is, consequently, similar in design to the "Ars Poetica" and Boileau's "L'Art Poétique." While throughout it we can see the influence of these two works in many of the details, the plan is markedly different from that of either, and on the whole, the work is much more original than that of Boileau. Indeed, the Englishman would seem to have purposely left his work incomplete, rather than risk the accusation of plagiarism by following too closely his predecessors in the same line. Other poems written in the so-called classical style, which Pope's works may be said, perhaps, to exhibit in its highest perfection, soon followed, and confirmed the belief among the critics and the reading public of the time, that in their author there had arisen, if not a great poet, at least a master of the science of poetry, who could teach others to write, if he could not himself write, poetry of the highest order. Among these other works may be mentioned his "Imitations of Horace," in the form of satires and epistles.

But this classical style, which owes so much to Horace, although it appears in a sort of barren splendor in the writings of Pope, was, in the hands of later poets, possessed of genuine poetic feeling to contribute to the production of some of the finest of English poems. That graceful and lucid style—simple, yet dignified: compressed, yet showing no signs of such compression; seemingly natural, yet in reality highly artificial, being the result of much revision and correction—which we find in such gems as Gray's "Elegy" and Goldsmith's "Deserted Village," wedded to thought equally meritorious from a poetic standpoint, certainly owes its existence, in great measure, to the influence of Pope, and through him to Horace. Such an inference can, in view of the facts of the case, scarcely be denied to be correct.

I am aware of the fact that many critics at the present day are disposed to belittle the style of expression so assiduously cultivated by the classical school of poets. It is said that this extreme care for the form and movement of the verse is worthy only of a childish age—of a time when the function of poetry was to tickle the ear rather than to stimulate the higher faculties of the mind and soul—and that the present age, with its more intellectual readers, can well afford to dispense with the music of poetry, as a needless, if not indeed, in many cases, a harmful accessory. And yet, though the charm of poetry is something so subtle and elusive that it defies all attempts to describe it, or to say just wherein it consists, certainly no definition of poetry which should ignore the large part which *music* plays in its constitution would be at all a reasonable one in view of the facts of

the case. For is there any difference in the thought between a transposed form of such a poem as "The Curfew," made by simply changing the position of one or more words in each line, and the verses in their original form? And yet the charm, the beauty of the sentiments is thereby almost totally destroyed. True, in such a process more has been lost than the mere regularity of accent and harmony of the sound. That proper ordering and sequence of the ideas constituting a harmony appealing to the intellect, as the rhythm had appealed to the ear, has by the process of transposition been interfered with, and the consequence is the annihilation of that harmony of thought and of sound which had given to these simple, sometimes commonplace, statements the qualities of poetry.

Pope says on this point: "Yet most by *numbers* judge a poet's song," and though we may not endorse the popular idea in this respect yet surely it may also be said that lack of care in regard to these points is very reprehensible in a poet.

But if modern poets have, in their zeal to appear natural, chosen to forego this elaborate finishing process for their poems, which Horace and his imitators considered so important, and have thus lowered the standard for poetry in respect to its musical qualities, they have also made large and valuable additions to the fields of poetic thought. Horace had used nature in his poems for the most part merely as the background of the stage on which man was the chief actor. Others of the classical poets had used nature in motion to illustrate human action; as when Homer describes the shock of battle as resembling the dashing of the waves round some rocky headland. But with the advent of the new school of poets, toward the close of the last century, came a use of nature in poetry entirely different from any of these.

Consider, for example, Burn's verses on "A Mountain Daisy." The first part of this is addressed altogether to the flower, and is one of those beautiful nature-lyrics so much cultivated by the poets of that time. But while reading this part we cannot help being impressed with the notion that the poet had throughout one eye, as it were, on man—that the poem was, in fact, an allegory. Hence we are not surprised to find him in the succeeding verses unfolding the allegory, and showing the analogy between the flower and human life. Lover's verses on Indian summer furnish another example of this use of nature in poetry.

This method of dealing with nature is found so frequently in the poetry of Wordsworth's time as to be almost a distinguishing characteristic of it.

Another method of using nature, comparatively rare in the writings of Horace and the poets of the classical school, is that found in Longfellow's "Sunset Scene on the Mississippi," (Evangeline ll., 864-872). Here the poet shows the power of natural objects to influence sympathetically the human mind.

In the passages just mentioned we see nature invested with more dignified attributes than had heretofore been assigned to her, in being made a teacher and source of inspiration for man. Something of this kind had, of course, been done by the ancients in their personifications and deifications of the powers of nature. But in the Greek and Roman poets it is chiefly nature in its role of an arbiter and controller of man's fate that is personified—in a word, the strong and violent in nature—just as early poetry confined itself chiefly to the expression of the stronger passions of the human mind. Modern poetry, on the other hand, manifests a preference for the humbler, gentler side of nature. The old poets had but little love for or sympathy with the personified forms of nature which they introduced into their poetry, but rather awe and dread. An Æolus letting loose his winds to destroy the fleet of Æneas makes a poetic incident, but the attitude of the poet toward nature is totally different from the attitude in Bryant's "Evening Wind." And Horace's allusion to the *Scorpius formidolosus, pars violentior natulis horae* shows an attitude widely different from that of Wordsworth in the poem, "The Education of Nature." In the former we see blind fear of nature, as of a dark inscrutable agent, influencing, usually for ill, the fates and lives of men, while in modern poets this feeling has given place to one of trust and confidence in nature, as the expression of the will of a divine being whose care is over all his works, and whose divine plan may be seen in its greatest perfection in the humbler rather than in the higher part of his creation.

These differences between the Greek and Roman and the modern poets in their treatment of nature are, however, but natural results of differences in the ages in which they each lived. A writer's environment must count for much among the causes which contribute to the production of his works, and especially is this true in the case of poets. In this connection let us look at Horace's life. Cradled in the period which saw the conspiracy of Catiline; brought to man's estate amid the bloody scenes of the civil war between Caesar and Pompey; inured to all the horrors of war as it was then carried on, while serving as a soldier in the army of Brutus and Cassius, and familiar with proscriptions and butcheries of Roman citizens, as things of common occurrence, Horace was too much occupied with the stern and terrible

realities of human life to write odes to birds and flowers, or to reflect much on the moral lessons which are inculcated by the order and beauty of the processes of nature in her quieter moods.

Compare with such a life-history that of Wordsworth: reared amidst scenes of peace and contentment; surrounded by a moral atmosphere purified by centuries of ethical and religious culture, the highest the world has ever known; living for a great part of his life amid beautiful and quiet scenes well calculated to call forth reflection, and to foster a love for nature on her own account; such influences, so widely different from those surrounding Horace, could hardly fail to develop a character correspondingly different, and by consequence to produce poetry of a finer vein than that of the Roman poet.

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*THE PRONUNCIATION OF EI.*

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Originally every “e” was represented in Greek by E, (just as every “o” was represented by O,) and in most local alphabets this prevailed as late as the year 400 B.C.

But at an early period the Greeks borrowed from the Phoenicians the letter which the latter called “Cheth,” the value of which was equivalent to “ch” in “loch”. The Greeks first employed this letter as a mere aspirate, but finally used it to represent the so-called long “e,” hence its name “eta,” just as *a* was called “alpha.”

It is not at all likely that the original basis of distinction between the two “e” sounds was one of quantity, as the ancient method of lengthening was to double the vowel rather than to use a different symbol. We assume the difference to have been one of quality, H being used to denote the open sound of “e,” and E the closed: we assume further that H, as the open sound, had a value similar to that of the first “e” in the French “mère”, and that E, as the closed sound was equivalent to “e” in “donné.”

If later the distinction between  $\epsilon$  and  $\eta$  became one of quantity, it could not have been firmly settled, for as late as 334 B.C., we find E written for  $\epsilon\iota$  (=  $\epsilon\epsilon$  or  $\epsilon\nu\tau$ ).

Now, if E originally did duty for both e’s, and if, when H was invented, the distinction was merely one of quality, that of quantity being a later and accidental development, we can conclude that the dividing line between the two sounds must have been a narrow one.

The importance of establishing this fact will presently be manifest, when we treat the cases where  $\epsilon\iota$  and  $\eta\iota$  are interchangeable.

As regards  $\iota$ , we may assume without discussion that its value was that of i in “machine.”

Let us now treat the combination  $\epsilon\iota$  directly.

It exists in Greek in two distinct types:—

1. The genuine  $\epsilon\iota$ , where the  $\iota$  is radical, representing an Indo-European “ey” Cp. πόλει.

2. The spurious, as a result of extension ( $\epsilon\epsilon$ ) or of compensation ( $\epsilon\nu\tau$ ) Cp. ἐφίλει, τιθεῖς.

In neither of these cases can we correctly call  $\epsilon\iota$  a diphthong, as the two elements  $\epsilon$  and  $\iota$  do not become one sound. It is interesting to note that the ancient authorities were uncertain as to whether  $\epsilon\iota$  was

a diphthong or not, the earlier grammarians classing it among the genuine diphthongs, the later refusing to admit it at all.

Therefore in using the terms genuine and spurious to designate the two forms of  $\epsilon$ , we do not use these terms in their ordinary sense, when applied to diphthongs.

As regards the genuine  $\epsilon$ , it seems to have been almost constantly written in its proper form in Ionic and Attic inscriptions from very early times. Yet a few cases are quoted where it is replaced by a single E. They are mainly from sources of a private nature :—

$\Pi\epsilon\sigma\iota\delta\sigma = \pi\epsilon\iota\sigma\iota\delta\sigma$  C. I. A. 4. 373.<sup>a</sup>

$\kappa\epsilon\tau\alpha\iota = \kappa\hat{\epsilon}\tau\alpha\iota$  C. I. A. 4. 491.<sup>27</sup>

But this was not the case everywhere.

For example, in the Doric of Corinth *both forms* of  $\epsilon$  are represented by a single E.

e.g.  $\Pi\omega\tau\epsilon\delta\alpha\iota$  ( $\pi\omega\tau\epsilon\iota\delta\alpha\iota$ ).

$\kappa\lambda\epsilon\tau\omega\lambda\sigma$  ( $\kappa\lambda\epsilon\iota\tau\omega\lambda\sigma$ ).

And in the Corinthian Clay Tablets, edited by Röhl, the word  $\pi\omega\tau\epsilon\delta\alpha\iota$  appears twenty-six times written with E.

This, then, goes to prove conclusively that the basis of  $\epsilon$ , here at any rate, whether genuine or spurious (so called) was an e sound.

But we must not assume that it was a mere e sound, for the Corinthian alphabet had a special letter to represent both grades of e. The apparent suppression or absence of any i sound will be explained later. In Corcyra, another Doric branch, both  $\epsilon$ 's are written properly, showing how this symbol varied. But in Attic, with which we are chiefly concerned, the two  $\epsilon$ 's for some centuries were treated differently, both as regards their orthography (and consequently we are safe in assuming, as regards their pronunciation), although for practical purposes it is useless to discuss what the difference may have been.

As already stated genuine  $\epsilon$  was hardly ever represented by E in Attic, but previous to 403 B.C., the archonship of Euclides, the spurious  $\epsilon$  is generally represented E.

In C. I. Gr. 3044, the word KENO (=  $\kappa\epsilon\nu\omega$ ) appears six times with simple E.

Other forms are

$\alpha\beta\lambda\alpha\beta\epsilon\varsigma$  for  $\dot{\alpha}\beta\lambda\alpha\beta\epsilon\varsigma$

$\pi\omega\lambda\epsilon\varsigma$  for  $\pi\omega\lambda\epsilon\iota\varsigma$

$\epsilon\rho\gamma\alpha\sigma\tau\alpha\iota$  for  $\dot{\epsilon}\rho\gamma\alpha\sigma\tau\alpha\iota$ ,

which will account for Homeric omission of augment in many cases.

When we meet this form of  $\epsilon$ , then, previous to 403, what value must be assigned to it?

And here we must make the statement that the Greek pronunciation in early times must have been *phonetic*; this is the only system that can obtain in the very early stage of a language, before grammarians or etymologists have begun to assign scientific reasons for orthography.

Another principle to be stated is:—

Where the orthography is constant, the sound is constant.

Where the orthography is inconsistent, the sound is variable.

Accordingly, we assume that genuine  $\epsilon$  was pronounced "ey" (Cp. Lat.  *eius*) consistently. That spurious  $\epsilon$ , when so written, had *practically* the same value; when written simply as "E", the " $\imath$ " sound was not so prominent.

It is not an offence against the phonetic system to claim that  $\epsilon$  in a word like  $\epsilon\tau\alpha$  (=  $\epsilon\imath\tau\alpha$ ) has a slight " $\imath$ " value, as this was really an inherent characteristic of that letter.

In illustration we may quote two cases where  $\epsilon$  has a tendency to pass into  $\epsilon$ :—

I. Before  $\sigma$  with consonant following.

Cp. The Boeotian form  $\Theta\omega\phi\epsilon\sigma\tau\sigma\delta=\Theta\epsilon\phi\epsilon\sigma\tau\sigma\delta$

II. And far more frequently when followed immediately by vowels.

$\beta\alpha\sigma\iota\lambda\epsilon\alpha=\beta\alpha\sigma\iota\lambda\epsilon\alpha$  } Attic of the 5th and 4th Centuries.  
 $\epsilon\alpha\sigma\tau\alpha=\epsilon\alpha\sigma\tau\alpha$  }

Note also the opposite tendency of  $\epsilon$  to simplification before vowels:

$\tau\dot{\alpha}s\ \dot{\eta}\mu\sigma\epsilon\iota s$  (Thucydides).

and the double forms  $\pi\lambda\epsilon\omega\nu$  and  $\pi\lambda\epsilon\iota\omega\nu$ .

Proving that there was undoubtedly a natural  $\imath$  value in  $\epsilon$ .

After the year 403 B.C., spurious  $\epsilon$  began to become identical with the genuine  $\epsilon$ ; and after the first decade of the 4th century E is very rarely found for spurious  $\epsilon$ . In fact, in an official document of Athens of the year 378/7 there is complete identity in the orthography of both  $\epsilon$ 's and, we may assume, in the pronunciation also.

We now pass on to the cases where  $\epsilon$  is represented by  $\eta$  ( $\eta$ ).

Dorian inscription of a very early date have sometimes  $\eta$  (E), sometimes  $\epsilon$  for  $\eta$ .

In Boeotia (Aolic)  $\epsilon$  is indistinguishable from  $\eta$  and  $\eta\iota$  ( $\epsilon=\left\{ \begin{array}{l} \eta \\ \eta\iota \end{array} \right.$ )

In early Ionic inscriptions  $\epsilon$  frequently replaces  $\eta$  in the subjunctive, and the  $\imath$  is often dropped in the Dat Sing.  $\epsilon\left\{ \begin{array}{l} \eta \\ \eta\iota \end{array} \right\}=\eta$

In Athens from about 376 B.C., + EI (sometimes E) was often written for HI, and this tendency increased the later the period, so much so that at the close of the century EI for HI actually prevailed.

e.g.  $\tau\epsilon\hat{\iota}$   $\beta\omega\lambda\epsilon\hat{\iota}$ , etc.

$\delta\upsilon\tau\hat{\epsilon}$  (=  $\alpha\hat{\delta}\tau\hat{y}$ ). C.I.A. II. 61., later than 357.

And in Attic, too, we find the reverse of this i.e.  $\eta$  put for  $\epsilon$ .

Cp.  $\gamma\rho\mu\mu\alpha\tau\hat{\eta}\nu$  C.I.A. II. 90., (about 356)  
 $\pi\circ\lambda\eta\iota\dot{\alpha}\kappa\rho\pi\circ\lambda\eta\iota$ . C.I.A. 4. 51, (410 B.C.)

Also II. 25, 35, 42.

An interesting remnant of the confusion is seen in the 2 Sing Ind. Mid. of the verb,  $\lambda\nu\epsilon\iota$  or  $\lambda\nu\eta\iota$  the form in  $\epsilon\iota$  being being peculiar to strict Attic, as opposed to  $\eta\iota$  in the  $\kappa\omega\eta\iota$ .

Historically  $\lambda\nu\epsilon\iota$  is impossible, as the form,  $\lambda\nu\epsilon\sigma\alpha\iota$  by the loss of intervocalic  $\sigma$  would resolve itself into  $\lambda\nu\eta\iota$ . The form  $\lambda\nu\epsilon\iota$  can only have come through confusion of sound. Strangely enough the  $\kappa\omega\eta\iota$  shows this false form, in the three verbs  $\beta\omega\lambda\omega\mu\alpha\iota$ ,  $\delta\circ\mu\mu\alpha\iota$ ,  $\ddot{\alpha}\psi\omega\mu\alpha\iota$ .

We may see now the importance of settling the value of the two sounds  $\epsilon$  and  $\eta$ ; we pointed out at the beginning that these were separated by a very narrow line, even when the different forms were in use: so the conclusion from the examples just quoted, as well as the usage in other dialects, is irresistible, namely, that  $\epsilon\iota$  and  $\eta\iota$  were practically identical in sound, and whatever distinction may have existed between  $\epsilon$  and  $\eta$ , it was quite lost when the vowel sound "i" was added.

We have already shown that because  $\epsilon$  was written to represent  $\epsilon\iota$  it did not follow that  $\epsilon\iota$  had merely an  $\epsilon$  sound, and exactly the same remark applies in the case when  $\eta$  was put to represent  $\eta\iota$ .

That the letter  $\eta$  possessed an inherent i sound is indicated by the fact that the *Eubœan Ionic* of the 4th century simplified  $\eta\iota$  to  $\eta$  before vowel, e.g.  $\iota\epsilon\rho\hat{\eta}\nu\iota$ .

In addition, as already stated, early Ionic inscriptions had a tendency to drop the  $\iota$  from the dat. sing, the  $i$  sound being almost submerged by the long vowel.

That this was a general principle is shown by the fact that with the close of the 3rd century B.C., the "i" in  $\alpha\iota$ ,  $\eta\iota$ ,  $\omega\iota$ , began to disappear altogether, although carefully composed inscriptions and papyri at the beginning of the 2nd century still use the "i" where it should be used, but what is a striking example of the inherent  $\iota$  force in  $\eta$ , even these write such forms as  $\dot{\epsilon}\iota\eta\iota$ .  $\theta\epsilon\iota\eta\iota$ .

## THE FINAL SOUND OF EI.

Outside of Boeotian the examples for an early simplification to an "i" sound are not numerous, nor are they sufficiently trustworthy.

But from the end of the 3rd century both  $\epsilon$ s became simplified to  $\iota$  in the most diverse regions of Greece. The sources of information on this point are the Delphic manumission documents and the Egyptian papyri, where the writers show complete ignorance as to where they should write  $\iota$ , where  $\epsilon$ . Cp.  $\pi\alpha\rho\alpha\mu\acute{\alpha}\tau\omega$ ,  $\tau\epsilon\mu\acute{\alpha}s$ ,  $\iota\mu\acute{\alpha}$ ,  $\dot{\epsilon}\sigma\tau\acute{\epsilon}\nu$ , etc.. Before the Christian era the simplification had become complete.

This, then, is an emphatic proof of the earlier prevalence of the i sound in “*æ*,” and the consequent impossibility of it having been a simple long “e” sound. How could the sound ē in the 5th and 4th centuries develop into a pure “i” sound in the latter part of the 3rd century?

And it is just as impossible to assume that “*æ*,” while pronounced *eɪ* in the 5th century became a simple *e* in the 4th. How again could we account for the final prevalence of the “*i*” sound?

The evidence from Latin transcriptions is here of considerable value. The fact that both  $\epsilon$  and  $i$  had practically distinct values is indicated by the transcription in some cases by  $\bar{e}$ , in some by  $i$ :

|                                     |                                      |                               |
|-------------------------------------|--------------------------------------|-------------------------------|
| <i>e. g.</i><br>ē in early words as | Ænēas<br>Medēa<br>Balinēum<br>Platēa | Tiresias<br>Iphigenia<br>Clō. |
|-------------------------------------|--------------------------------------|-------------------------------|

Note the double forms Alexandrēa and Alexandria,  
Dariūs and Darēus.

Generally "e" predominates, even later, showing how firmly settled the "e" sound was.

Stress must be laid on the analogy of *ai*, *oi*, *ov*, all of which were pronounced on the same system (in early times) as *ɛ*, that is, both elements were sounded. The proofs are as follows:—

- ai* 1. Elision in  $\lambda\acute{e}\gamma\epsilon\tau'$  (*ai*)  $\acute{e}v$ —had *ai* been equivalent to  $\eta$ , as some claim this could not have taken place.

2. Dionysius of Halicarnassus (time of Augustus), says that  $kai'\Lambda\theta\eta\nu\alpha\omega\nu$  is a case of harsh composition, as the sounds *i* and *A* cannot blend.

3. The grammarians describe *ai* as “ $\check{\eta}$  *ai*  $\delta\acute{i}\phi\theta\eta\gamma\gamma\sigma$   $\dot{\eta}$   $\acute{e}k\phi\omega\nu\omega\hat{\eta}\sigma\alpha$   $\tau\grave{o}$  *i*,”  
*Oi.*

1. Crasis in  $\acute{e}\gamma\acute{w}\hat{\delta}\alpha = \acute{e}\gamma\grave{w}\ o\hat{\delta}\alpha$

## 2. Latin transcriptions in early words :—

Citharoedus, comoedia, etc., where the “e” expresses the original “i.”

Ov.

For a long time the spurious type of *ov* (*i.e.* = *oo* or *orɔ*), was almost exclusively represented by O; (sometimes even the genuine (diphthong so called), was represented by O). That this sound became “u” is proved by the Boeotians adopting it in the 4th century to represent their old “u” (= *oo*). And just as this sound “u” came through o+u, so “i” came through e+i, the final sound predominating in each case. This case is of the utmost importance as the historical development of *ov* is practically identical with that of *ei*.

The *practical* conclusion of the foregoing is that *ei*, whether the genuine or the spurious type should be pronounced as “ei” in the Latin *eius*.

We say “practical,” for any attempt to differentiate the two types of “*ei*” can only have a theoretical value. The main point to recognise is that in *ei* (both types) we have two distinct values, e+i, each of which in accordance with the ancient system must have been recognized; the second element, however, did not receive its full value, and the result was the sound defined above, which may for convenience be expressed by “e<sup>1</sup>. ”

## THE "ARS POETICA."

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It is not the purpose of this paper to criticize either the matter or the style of that agreeable composition, the "Ars Poetica." It was written, as a metrical discourse on such a theme should be written, with a flow of varied and interesting talk, but without the exactness of a treatise. It contains much good sense, presented in a lively manner, and, what constitutes its most attractive feature, it reflects, from time to time, the genial personality of the poet himself.

The subject was not new in his day. The keen eye of the great Grecian scientist had swept it with searching glance, and the Alexandrine critics had no doubt found it a congenial field for the exercise of their voluminous craft. Innumerable writers have treated of it since the days of the Roman poet, and he has been imitated in an inferior way in the verse of Boileau and of Pope. The popularity of the theme with litterateurs and philosophers is due to the vagueness that surrounds many of the principles of this most important of the arts, and it is the aim of the present paper to assist in dissipating the mists that envelop the subject by developing some of the thoughts of the "Ars Poetica."

(a) "The poet seeks either to benefit or delight" (*aut prodesse aut delectare*). A more exact statement would be that both improvement and enjoyment are derived from the poet's work. The poet's aim, however, is to satisfy his own aspirations by the creation of a beautiful object, rather than to afford either pleasure or profit to others. Pleasure certainly results from his labor as from all meritorious art, and improvement is derived from associating with beautiful and noble ideas, but the poet has neither of those ends in view. He is wholly engrossed by his delight in the creation of an object that gives expression to his sense of the beautiful. He has thus two incentives to his work, the pleasure resulting from the exercise of creative activity in its highest form, and the contemplation of the beautiful object that he has himself created. The first of these is temporary, the second may be permanent.

In order, however, to understand the poet's aim it is necessary to know something of what we mean by a beautiful object such as he creates. Whatever may be the character of beauty in its last analysis

—and every psychologist has his own theory of it—it is, at any rate, agreed that it is that quality in things by which they afford satisfaction in themselves apart from any advantage to be derived from them. The poet sees such forms in the world about him, he has such forms in his own mind; they arouse a sense of beauty within him; the sense of beauty once aroused craves a more complete and permanent satisfaction; and the poet betakes himself to the creation of an object which will satisfy his desire.

It is interesting to follow the process by which he works. Being absorbed in the exercise of creative power, his whole being is in a state of tension. His emotions are lively, his imagination becomes doubly active, and he catches glimpses of relations new to him, and of the forms that thrill him with delight. His will is quiescent, for his emotions dominate him, accelerating the action of his imagination, which, in its turn, acts as a stimulant to his emotions. Emotional thought easily suits itself to metrical language, winged thought to winged words. This will be the more easily understood when we consider that life exists in the midst of vibratory movement. The entire composition of matter is said to be of this character, and our intimate association with rhythm, furthermore, is seen in the case of some of the most vital of the bodily functions, such as respiration and the beating of the heart. It is natural then that poetry, the highest expression of life, should assume a rhythmical form.

(b) Having glanced at the process of the poet's work, we shall now consider the product. For this purpose it may be of advantage to compare with her sister arts this most indestructible of the works of man. *Ut pictura pesis*, says Horace, and these are not the only arts that have a more or less close relationship. Amongst other things it may be noted that they are all alike unlike nature, inasmuch as they are free from the haunting shadow of necessity ever present in nature. They have besides another advantage over nature in embodying ideas more clearly, and in a more permanent way than nature does, although they cannot attain her endless variety and profusion. Another bond of union is their common origin in the desire of man to give expression to his higher spiritual nature. They differ from one another on account of the wide differences in the medium they employ.

Architecture, the eldest of this aristocratic family, on account of being confined mainly to an adaptation of the useful, is the most limited of them in range, though not in intensity of expression. Closely associated with it, because of the material they use, are sculpture and painting, the former giving utterance to the mind mostly through the

suggestiveness of the human form, the latter in a freer way through the instrumentality of color. These three arts are much inferior to poetry in breadth and variety, but they, at least, equal it in power. Poetry has little in common with them. The simple grandeur of Milton's epic may suggest a Doric temple, the Antigone may be said to breathe statuesque repose, Virgil as a landscape painter is matchless, but these figures of comparison derive their interest from the obvious general contrast in the things compared.

Poetry is more closely allied to music and the dance; these three being concerned with relations of time, as the former three were with relations of space. They have measured movement in common, but the dance expresses itself through a kind of living statuary, and while music, like poetry, uses sound as its medium of expression, the intervals of its melody are quite different from the intervals of speech, and it has, in addition, a simultaneous harmony wholly wanting to verse, a quality that gives it a superiority in imitating the varied composite sounds of nature. Poetry, however, has a melody of its own, that is to say, its syllables follow one another with an agreeable succession of intervals, and it has a harmony of its own in the artifices of alliteration, assonance and refrains, and especially in the device of rhyme, which has been called a memory and a hope. In imitative harmony we have seen that poetry is inferior to music. The wider harmony between the parts of a work of art, which is the result of aesthetic perception or taste, is, of course, shared by all the arts.

Music is mainly an expression of emotion, poetry has the advantage of combining definite thought with emotion, while prose, the art most closely akin to verse, is chiefly concerned with the expression of thought. Prose is, therefore, more accurately imitative than poetry, but both are, in this respect, far behind the plastic and pictorial arts. The latter represent objects immediately, while the spoken and written language of prose and verse is merely suggestive.

Prose is an art much wider in its range than poetry, and may extend far into the domain of the other, almost every species of poetry having its counterpart in prose. Fiction, for example, is the modern representative of the Epic on the one side, and of the Drama on another. Prose, however, like architecture, is less distinctly a fine art, since it is largely a combination of the useful and the artistic. It is in passages in which the emotional quality predominates that it approaches closest to poetry. Its rhythm customarily steps with a longer and more irregular stride than that of verse, but in such pass-

ages the step becomes shorter, more rapid, and more regular. This is a style adapted only to highly emotional passages, although some writers have fallen into the error of making it the ordinary vehicle of their thought. There is wanting, even to the most emotional prose, a certain rapidity and freedom of movement belonging to verse. In verse the thoughts wing their way to the mark, sped by emotion, and borne on the buoyant waves of metre. The scientists tell us that in fluids the molecules move about more freely and swiftly than in solids, being less retarded by their mutual affinity. In like manner the thought of verse is swifter because less encumbered by the trammels of logical sequence.

We find, then, that the distinguishing characteristics of poetry, in the union of which it differs from all the other arts, are :—the imaginative presentation of thought, its coloring with emotion, and its expression in metrical language.

(c) Horace gives some account of poetry in the early ages: “Once it was the part of wisdom to distinguish between public and private property, and between things sacred and profane, to regulate marriage, to build cities, to engrave laws on tablets of wood. Then came martial poetry, oracular responses, wise sayings, laudatory poems, and finally the drama as a recreation for husbandmen.” These are early developments of poetry, as also are those primitive forms, the charm and the riddle, but they are not the earliest. Poetry is, undoubtedly, spontaneous in its origin, but these are products of design. Indeed, Horace refers us to an earlier age, the mysterious age of Orpheus, and the connection of that obscure personage with the worship of Dionysus, points us, perhaps, to the true source of poetry, namely, the celebration of religious rites.

Suggestions of art are found everywhere in nature. Nature itself is art in relation to God, who, a contemporary poet tells us, is “an artist, not an artisan.” The ringing of bells is heard in the ice that crushes against the shore, the river does not merely reflect, but paints ideally the objects on its banks, the hand of the sculptor is seen in drifted snow-wreaths and curious window-frostings, the sky is a dome, and the forest a cathedral. Uncultured races, who are as imaginative as children, cannot fail to be impressed with what are to them inexplicable phenomena. What to us are mere scientific doctrines, to them are living realities. When, therefore, their susceptible natures are stirred by love, or war, or religion, their impulsive speech will assume an imaginative cast. But our knowledge of primitive peoples seems to show that religion is the earliest influence to call forth the poetry

in them, not because it is the most powerful of the three, but because it is least trammelled by the grosser passions.

Their religious excitement takes the form of a wild chant accompanied by an irregular dance. Thus the earliest form of poetry, the chant, is coincident with the earliest type of music, the recitative. The dance readily falls into a rhythmical form, for we have already seen that all nature is full of rhythm. The rhythm of their movements requires a corresponding regularity of speech, and in time metre is evolved.

Art which is thus composite in the first instance—music, dance and verse combined—becomes differentiated in course of time, since its nobler effects are the simpler. After this process it tends once more to complexity, as we see in the case of the opera, the effects of complex art being temporarily more entrancing. Max Nordau says that "the work of art of the future is a drama with music and dance, which unrolls itself amid landscape painting, within a masterly creation of architectural art, represented by actors who are really sculptors realizing their plastic inspirations by means of their own bodily appearance."

(d) Horace, while assured of the permanence of his lyrics, is less certain of the hexameters. He says that he would not think of comparing with heroic song his discourses that creep upon the ground (*repentes per humum*). It has been questioned whether satyric and didactic poems, and poems of a kindred sort, are poetry at all. They are cast in an epic form but lack the epic objectivity. The value of poetry is not so much a matter of choice of subject as of handling of material. Its range is as wide as the soul, and includes the world of mind no less than that of matter. But the material must be dealt with artistically, that is to say, must appeal to the aesthetic feeling, else the composition may be called a poem but will not be poetry. To the poetic method is opposed the scientific. The poet illuminates his subject with lightning flashes that enlarge the world and the soul, taking the eye of the beholder far a-field, and giving a sense of boundlessness and greatness. So much is this the case, that in the presence of a great poem we sometimes refer to ourselves the poet's power, and say, "I too am a poet," confounding the capacity to enjoy with the power to create. The scientist also illuminates his subject, but, however bright the light may be, there lies just beyond a circle of darkness that imparts a painful sense of limit. The scientist slowly enlarges the circle of vision, the poet extends it infinitely in a moment of time. The scientific method employs the

reason, rather than the more direct channel of imagination, for bringing the subject before the mind, and when we find a poem appealing mainly to the reason we may be sure that whatever charm it possesses does not arise from its poetic excellence. Pope's "Essay on Criticism," for example, has little more claim to be entitled poetry than a colored map has to be called a painting. Perhaps the closer construction of the Latin enables the Roman poet to deal successfully with material that would ensure flatness and failure in almost any other language. Brevity of expression is essential to imaginative activity.

(e) "Let the chorus support the good and love those that fear to sin," (*amet peccare timentes*).

Plato seems to have inclined to the belief that the good, the beautiful, and the true, are closely related if not identical. Nevertheless there is little necessary connection between the true, the sense of harmony in the relations that make up the world; the beautiful, the sense of harmony between the world and the mind; and the good, which is a social sense. This is the reason why some have maintained that for art, nothing is immoral. But though the æsthetic sense is quite distinct from the scientific and the moral, yet it cannot afford to run counter to them. For, though the senses are separate, yet the mind is one, and whatever affects one sense reacts on all. Thus a work of art may offend the sense of the true by its improbability. Horace's composite figure of woman, horse, bird, fish, and all manner of beast, is a conspicuous instance. In the same way an artistic production may incite to evil by representing evil as a good. The result, as in the former case, is to diminish the æsthetic value of the work. We lose sight of the reptile's beauty thinking of the poison of its fangs. It must not be forgotten, however, that there is no absolute standard of truth and morality any more than there is of beauty.

(f) "Mediocrity in poets is condemned by gods and men, yes and booksellers, too," remarks the Apulian bard.

Nothing is more uncertain than taste. Witness the wide divergence between our own standard of art and that of the Chinese. But apart from the question of taste, there is poetry and poetry, and, as we descend the scale of merit, we at length come to a point where we say, "This is not art." "The poet," an American seer tells us, "gives us eminent experiences only—a God stepping from peak to peak, nor planting his foot but on a mountain." The poet must see man in nature, nature is to him but a reflection of man. Another test of his genius is his ability to interpret the spirit of his own time. Poetry

may be the deepest philosophy, its thought being carried straight and far by feeling.

Poetry is prophetic too : it makes us feel the greatness of our destiny. Science has unfortunately pointed out our origin, and for this blow to mankind the grand remedy is the optimism of poetry. Hence it is fitting employment in the services of the temple.

*"Curmine di superi placantur, carmine manes."*

(g) "It has often been a matter of enquiry whether genius or art (*natura an arte*), is more essential to a poem." Horace has no great opinion of genius as a source of good poetry apart from art. He ridicules Lucilius in this respect. "In an hour he would dictate two hundred verses as though it were a great exploit, standing on one foot." The great requisite in his eyes is finish. A poet, he says, will express himself well if by a curious combination he makes a familiar word seem original.

Yet he did not believe in art for art's sake. Philosophy, he says, is the foundation and source of good writing. Not so thinks Flaubert, who insanely declares that a beautiful verse meaning nothing is superior to a less beautiful verse meaning something. Pope is partially correct when he tells us that, "True ease in writing comes from art, not chance," but no matter what skill a poet may acquire in expression, his poetry can never rise higher than his own nature, and, that is primarily the gift of nature, and secondarily the result of wide and innumerable, and for the most part unconscious influences. Poetry thus can be cultivated, and is, besides this, liable to growth, as a man is liable to growth, but for all that, the most favorable environment and the most varied experience the widest reading and the most careful practice, cannot supply what nature originally withheld.

*"κοῦρον γὰρ χρῆμα πειητής ἔστι καὶ πτηνὸν καὶ ἵερόν."*

## MATHEMATICAL AND PHYSICAL ASSOCIATION.

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### *CHAIRMAN'S ADDRESS.*

F. F. MANLEY, M.A., TORONTO.

In addressing the Mathematical and Physical Association, my first utterance must be one of thanks to its members for placing me in the important position of presiding officer. I am sensible enough to know that this has not been done as a recognition of any great mathematical distinction on my part, but, may I be permitted to say, rather as a very generous reward for any humble services I may have rendered in assisting others in placing the Association in the very prominent place it occupies in the Province of Ontario to-day.

Any claim that I may be allowed to make to mathematical distinction must be by proxy in the persons of those who, as pupils, have passed from my hands, and many of whom, I am proud to say, are now making a place for themselves, much superior, in the mathematical world, to that ever attained by their old schoolmaster.

As to playing a part in laying the foundation of this Association, and furthering its objects in every legitimate way, I may be allowed to claim a certain amount of credit.

When an organization of this kind is to be made a success the labors generally devolve upon the secretary, and in assuming that position in connection with the Mathematical and Physical Association, in its formation six years ago, I was thoroughly conscious of this, and in laying down that office, after performing these duties for four years, it was highly gratifying to know that the energies and perseverance of its founders had succeeded in placing the organization in a position of permanence and importance.

I can look far enough into the future of this body to picture such a gathering as the one I am addressing, awaiting, with the eager curiosity of the mathematician, the opening address of their presiding officer.

Some important discovery is about to be made known, and the distinguished audience awaits its deliverance with pleasure and anxiety.

These will be the happy days when a leisure class of mathematicians shall appear, who will pursue their favorite study apart from its ability to provide them with their daily bread.

We can boast of very few of this class to-day in Ontario, for the average mathematician, who of necessity pursues the arduous labors of a High School life, finds little opportunity of carrying his researches to that point where fresh and important discoveries are likely to appear.

Our Association is unlike any of its sister associations in this respect. Its branches are many and of very different kinds. An address on an advanced topic would prove very interesting to some—but to those who have not pursued their studies in this particular direction, it might be quite the contrary. One-half the meeting would not be appreciating, in fact, would not understand, what the other half might consider a rich treat.

Not so in the other departments. Any lecture delivered before their members would prove interesting and intelligible to all.

This almost calls for action with a view to forming sections, each of which might carry on its special work, perhaps by correspondence; all uniting, however, in one grand object of furthering Mathematical advancement in the land.

You will be pleased to know that this subject has been under the consideration of a committee, which will report at this meeting.

It has, then, been my endeavor to discover a theme that would be of interest to you, and in coming to a decision I must remember that my hearers are the mathematical instructors of to-day, to whom this country looks for its mathematicians of the future.

I am sure, also, that having chosen a presiding officer you would be the last to wish him to withhold any opinion he may have, but rather that it should be expressed fully and fearlessly.

You must all admit that three things enter very largely into the cultivation of mathematics—the pupil, his teacher, and his text-book, and I intend to give a brief attention to each of these.

Our High Schools and Colleges are used to-day by many for whom they were not intended, while others who should attend them are debarred from doing so by even the moderate fees that are charged at present. Let me take the Association into my confidence.

I would give every boy and girl, free of cost, a public school education to the end of the fourth book classes, but shorn of many of the nonsensical frills of the present day. After this I would begin to discriminate according to mental ability. Those who passed a High

School entrance examination in a manner denoting special qualifications, which might be indicated generally by a percentage of marks, I would educate free for one year, whether rich or poor. I would submit these pupils to another examination at the end of that time, and adopt a similar sliding scale of fees for the next year. This would be continued to the end of the High School course. I would make a scale of fees for the others that would vary in accordance with their mental abilities.

At the University Matriculation Examination, I would again apply the mental test, as to the future cost of the student's education, and continue this policy to the end of the University course.

No boy or girl with exceptional abilities need be neglected, and for the services they may afterwards render the State they are entitled to an education at the public expense. If the son or daughter of the rich man happen to be short of intellect, they will be allowed to counteract this drawback, to a certain extent, by an expenditure of money for their higher education.

The cost of secondary and higher education under this system would not press as heavily on the public as that now in force. There would be fewer pupils, and those in attendance would not be retarding the progress of those anxious and able to go on. At the same time there would be fewer, but abler and better paid teachers. All this would tend to raise the standard of instruction, and no subject would derive more benefit than that in which we are all so much interested.

This naturally brings up the question of the teacher. You will agree with me, I am sure, that the country should have better teachers, who shall be better paid and more respected.

Of the pupils who, under the above principle, will be in attendance at the schools and colleges, very few of the wealthy class will make their way into what is called the teaching profession. It must look largely to those who are obtaining their education at the public expense, and as in the past so in the future, they will be found in the majority of cases to be the best.

In the first place, this must be an advantage to the teaching profession as regards quality and quantity.

By the elimination of undesirable pupils we would have a much smaller number of applicants for the right to teach, and there would not be so much necessity for the terrible examination tests that are now beginning to be looked upon by educationists everywhere as one of the drawbacks of the age. These examinations and the consequent

cramming are caused largely by the endeavor to pick out those who are to enter the teaching profession.

Now, if this profession is ever to be elevated and respected like its sister professions of theology, law and medicine, those who follow it must go to as much expense in acquiring it as they must in the case of these three. Why should the State provide training schools for teachers, and fail to do so for the other professions?

Compare the cost of becoming a teacher with that of obtaining the other professions, and you have the ratio of the respect in which that profession is estimated by the public.

Let the universities conduct their own entrance examinations for matriculation into the learned professions, and let the staff of the High Schools nominate those whom they think fit and proper persons to become teachers.

They will make very few mistakes, and if candidates are required to pay a good round sum for their training as teachers, there will not be such a rush for the Normal Schools and the College of Pedagogy. If perchance any may have been nominated that are unfit they will be discovered at these Institutions and their teaching ambition arrested.

Thus would be abolished this examination craze that is ruining the education of this Province.

There are some, no doubt, who think these examinations necessary to stimulate the teacher to a performance of his duties in the school-room. If, unfortunately, any teacher wishes to shirk his duty he can easily do so by so cramming his pupils that they will pass these examinations while their proper mental training is being sadly neglected. The cure is worse than the disease!

No, the class of teachers that will be the outcome of this proposed system will be so improved and respected that their opinion will be valuable on any subject in connection with their work, and they will be above any such suspicion.

Although it may appear a paradox, the change that I suggest should be advocated, chiefly by those who have the teaching profession in their view. At present teachers are obtaining their professional training cheaply, with all the attendant drawbacks to which I have alluded. The close-fisted school trustees and not over-liberal taxpayers are not opposed to this, for it gives them an excuse for keeping the salaries low.

It will be found that, after all, hostility to such a change will come from the taxpayer. It will be in the interests of the teaching profession to bring the change about.

Its members should be zealous in seeing that only good teachers are allowed to enter the profession. It is unwise to allow the want of teaching ability to be left undiscovered till teachers have been some time on duty. It seems to be a most difficult matter to dislodge an unsuccessful teacher, even though his drawbacks are well known. This is not so in business circles. Inefficient clerks, or salesmen, are not allowed to stay long in a successful bank, or business house.

I know the objection that will be raised to so radical a measure as that which I have outlined, and I also am satisfied that they are the results of the unfortunate grooves in which our system has been running in the past. The teaching profession must advance like others, and what has been good enough for it in the early life of this province will not satisfy it to-day or to-morrow.

A word or two about our text-books. The Mathematical text-books published by our members are confined to the work taken up in the High Schools. The University work is left to the English author. Two reasons appear for this—The demand is so small that there would be no pecuniary benefit derived, and very few of our busy graduates have time to make a specialty of the higher work.

There is no doubt the majority of the text books that have appeared in Ontario, have been issued as much for their market value as for the glory to be derived from them. This has often been the cause of their failure. They have been thrown together in many cases, and errors have appeared without number. Frequently it looked as if the work had to be done in a limited time, as if to head off another expected publisher. The result has been bad classification, and the appearance of problems, often well selected from other works, but badly arranged. All our text-books, both English, Canadian, and those from the United States, devote too much space and attention to what may be called the "letter press" of the book. If these books are to be used in our school classes, it is the teacher's duty to perform this part of the work. How much of this explanation and theory is read by the pupils of the schools to-day? Scarcely any.

Private students might find it useful, but they are few, and generally seek the services of a tutor!

This space should be devoted to well-arranged problems, whose solutions should be suggested, and the main principles, on which their solutions depend, carefully laid down. This would be of great use to those teachers in our schools, who have not had a long training in mathematics, and who are called upon to teach them sometimes.

This is all an outcome of habit, and only needs to be thought of to

be discontinued. What creatures of habit we are! What author has ever thought of using plain Arabic instead of Roman numerals in numbering his exercises. The same craze seems to hang to watch-makers who use them on their watches and clocks, and even go so far as to write those on the lower are upside down.

The first duty I perform on a new mathematical text-book, is to translate with a pen the numbers of the exercises. It's a wonder that I am not called upon to do it for the numbers of the problems in the exercise!

No mathematical text book should be issued without an accompanying book of solutions which should be placed at a price that would repay the author for his labor, and keep it out of the hands of the pupils. This would have the effect of decreasing the errors that appear so often in problems, many of which evidently have not been solved by the author at all. It would also lead to a better arrangement of problems. Every purchaser of a problem has the right to its solution if he is willing to pay for it!

I strongly advocate, as I have in the past, the abolition of answers from the text books. They are not needed in our schools. They lead to bad habits both from a moral and mathematical view. How often have those present witnessed the spectacle of a pupil's fingers itching to reach the answers, although it has been strictly forbidden.

One way of removing the temptation is to take it away! There are few problems in elementary mathematics that cannot be proved by the pupil, and this is what should be done, and would be done if the answers to the problems were not within his reach.

What better practice for a pupil than proving his algebra examples for particular values of the symbols, even if he does hit a "snag" now and then in the case of the "zero"? What better way of teaching him to avoid this dangerous character?

I hope this Association may see its way clear to urge this change upon the proper authorities.

While on this point, I would suggest that an official set of solutions for every mathematical paper set at the Departmental examinations be subsequently furnished some educational journal by the examiner and published at the expense of the department. They would be interesting and set many disputes at rest.

I must now close by wishing you all health and prosperity, and this Association every success in the future.

*ELEMENTARY GEOMETRICAL TRAINING AS A  
PREPARATION FOR HONOR WORK AT  
THE UNIVERSITIES.*

M. A. MACKENZIE, TRINITY UNIVERSITY.

In looking over the papers that have been read before this section during the past few years, one cannot help being struck by the fact that there is a great deal of discontent amongst our teachers of Geometry. And just as they are discontented with the scope of their work, so those of us who have to build a superstructure on the foundation laid at school are also a little discontented with the state in which we receive the material—not raw material, for in most branches of study it is apparently almost a finished product; but in the matter of geometrical knowledge it is very far behind the otherwise high standard. Not that the teachers are to blame, or that our boys are stupid—far from it. The teacher most properly aims at concentrating his pupils' thoughts upon those portions of Geometry, and those only, upon which he will be examined, so that the boy may score as high a mark as possible. The teacher or pupil who failed to so limit his work would be acting foolishly; and within these limits the results are surprisingly good, and reflect great credit on both teacher and pupil.

Now, whatever may be said about the evil of examinations, experience seems to point to their necessity. No one has yet suggested a practical substitute. But, school work will invariably be guided by the lines of the proscribed examinations; so that we must look to the matriculation syllabus to find the real cause for this unsatisfactory condition of geometrical training, and for the very inefficient knowledge of geometry possessed by the candidates for mathematical honors at the University. The gentlemen who draw up that matriculation syllabus create a demand for certain branches of knowledge, and our teachers throughout the province supply what is asked for. Until there is an official demand for something better, no real improvement can take place. When the present regulations were drawn up the honor man in mathematics received scanty consideration. Even under the most favorable regulations, the subject matter of Euclid is very difficult to teach. Though the stupidest child cannot help forming some geometrical conceptions for himself, yet these conceptions

are generally vague, and always incomplete. It is the duty of the teacher to so guide the child that his own indefinite ideas picked up from experience shall become clear, and gradually arrange themselves into a system complete in itself so far as it goes. For example, every child has some idea of a line or of a circle. The idea is not so bad. It is when he tries to put his idea into words that the trouble begins, and the teacher's work becomes anything but easy. Nor is it hard to see why Geometry presents so much difficulty to the average boy. Up to this point his memory has been his mainstay at school. His work has been, for the most part, a mere matter of remembering words or figures, and the relations of concrete things, so that he can reproduce or calculate with more or less accuracy. But Euclid's Elements demand something of him that has hardly been brought out as yet. He is now expected to form a few abstract ideas with absolute accuracy, and to follow some rigid little exercises in deductive logic. Unless he is guided at every step, slowly and painfully trained to reason for himself, the average small boy has little chance of grasping the unique simplicity of Euclid's ideas. They are too simple, and at the same time too general and abstract. One line differs from another line for him, not so much in form or length as in position. The tables of weights and measures which he has learned, have hardly given him a clear idea of units. He probably never thought of saying that a field is two hundred weight in extent, but he will very likely tell you that the farm house is just three acres from the road: and will then probably justify himself by saying that he meant square acres. If clear conceptions of a length, or an area, are not easy to grasp, or put into words, what will the poor boy do with an angle? He has no knowledge gained from experience to guide him here beyond a somewhat dim conception of a right angle. He has heard his elders talk about two ships at sea or two stars at night as appearing to be so many feet or inches apart. The truth is, that if he attains to a clear idea of an angle, or the difference between two angles, he has gone a step beyond the average man, even in Ontario, where the word "angle" is still usually a synonym for "corner."

It seems to me that Geometry is the most difficult subject to teach of all the many subjects upon our high school curriculum. So difficult is it, indeed, and so small is the progress made by the average boy, that we have allowed ourselves to be limited to Euclid's old text-book, and even to one particular edition of that. The result is a curious anomaly. What would we say of our classical friends if grammatical

exercises, unseen translations, and the writing of prose were done away with as a necessary condition for passing the matriculation? How would we greet a proposal to put enough book work to make a pass on every Algebra paper? Yet we have submitted to a convention which reduces the knowledge of geometry necessary for Matriculation to one hundred propositions written by the first man who ever published a book upon the subject. For this state of things, which he really disapproves of, nearly every teacher will yet make the same excuse. It is only one boy in ten, he says, who will even try to do the riders. It is hard enough to make them learn the definitions and propositions. And I know that that is true, but I believe the student's reluctance to tackle the riders would disappear, if a change in the regulations were to destroy his confidence that the propositions alone will suffice for a pass. In place of learning Geometry, the average boy treats Euclid now as a classic, and studies his book accordingly. I believe that if he could be made to fully understand the subject matter of the first book and make that knowledge his own, the other books would present no difficulty to him, and his mind would follow easily where it now usually flounders. In place of counting the propositions in each new book as so many different hard lessons to be learned, he would find them to be all natural deductions from ideas already mastered.

Be that as it may, the case of the boy who means to read for Mathematical honors is on a wider plane, and it is with him I am particularly concerned. He is the boy who does try to understand as he goes along, and he does most of the riders that are set him. But even he gets an inadequate training in geometry, for he is limited to two more books of The Elements, and the not very difficult riders in the same edition of Euclid that his brother the pass-man struggles through. With this equipment, he must, during the short years of his University course, tackle such subjects as Analytical Geometry, Particle Dynamics and Optics, which demand a considerable knowledge of geometry and geometrical methods. For example, what has Euclid's Third Book taught him about Radical axes or Poles and Polars, or has he got any idea of an Harmonic Pencil from the Sixth Book? Yet he will have to be familiar with these and many other elementary ideas not found in Euclid. Statical problems will demand of him a ready application of just that kind of geometrical knowledge he got a bare insight into when preparing for the mensuration questions that might be set upon the arithmetic paper. Of the Geometrical properties of the Conic Sections he probably knows nothing. In short, the gap

between his knowledge of Geometry and that demanded of his pass brother is not nearly so great as it should be.

Will you allow me to do what is, I know, an unpopular thing, and draw your attention, for the purpose of comparison, to the training of an English boy before he goes up to Cambridge to read for Mathematical honors. Let me say, first of all, that I am a loyal old boy of an Ontario Collegiate Institute; and ten years ago I went to England with the conviction that the educational standing of our schools here was the highest in the world. We might not be quite up to the old classical schools of England in the matter of the dead languages, but our Mathematics was in advance of anything in the old country. Three years of study at Cambridge and four years of teaching afterwards in England, left my patriotic convictions unaltered, so far as the pass man is concerned. We certainly demand from him, and get him to reach a much higher standard of knowledge here in Ontario than his English cousin ever dreams of. I question whether the ordinary pass degree from Oxford or Cambridge represents as much hard work as our Matriculation. A boy with a good memory and ready at picking up a smattering of languages, *might* find our Matriculation the easier; but the lad to whom languages present a difficulty would have less trouble in getting his degree from Oxford or Cambridge than in passing our Matriculation as it stands to-day.

So much for the pass man. In his educational training we can show the road to the English and keep a long way ahead. But the case is very different when we turn to the honor man. If he intends to read Mathematics he gets a better training at school than our boys, and it is especially in geometry that the marked difference in training occurs. He uses an edition of Euclid that does not overlook the modern developments of the science of Geometry. As a rule, such a boy will have worked carefully through Casey's Euclid and his Sequel to Euclid also. If there is a better, or more difficult collection of exercises published in English upon the subject matter of Euclid than is to be found in Casey's books, I should not like to have to work through it, for I found Casey hard enough. His books are not unknown here. More than once in looking over our past Matriculation papers I have come across old friends, and even found his familiar lettering. But this is not all. Geometrical Conics are taught at school with characteristic English thoroughness, and hundreds of examples are gone through. The geometrical properties, also, of a few curves, such as the simpler roulettes and spirals, are supplied from notes. An earlier training in Geometrical Drawing has given the English boy a habit of making

careful and accurate figures, and working neatly, which always stands him in good stead. Every examiner knows how irritating it is to come across carelessly drawn figures and slovenly work. The value of an accurate figure is very great to the student who has to work from it alone in a problem that is new to him.

I do not know that the English boy is any better trained in Algebra or Trigonometry than our boys here. It is in Geometry that the marked difference occurs. He has another advantage though, in having mastered the principles of Mechanics, including Statics, Hydrostatics and Dynamics, and done all that is possible without the calculus at these subjects before leaving school. Even the pass man at London University must possess a very fair knowledge of Mechanics to get through his matriculation, and at Cambridge it is an alternative for French at the Little-Go. Perhaps when we recognise the folly of trying to make a boy learn four languages at once, we may get Mechanics as a subject for Matriculation into its proper place, and so relieve the paper on experimental physics from any obligations in this direction. I hope so. But this is by the way; and yet it helps to point out that however excellent our Matriculation syllabus may be for other candidates it is singularly bad for the honor mathematical man. His teachers must work him along lines that are in some directions distasteful and in others inadequate. And it's not their fault or his that he is not better trained.

The want of more geometrical work at school makes itself felt throughout the honor course. I have had only two years' experience to judge by; but during that time I have had the pleasure of teaching several really good honor students, trained in a High School, and I found that they all had difficulty in grasping the geometrical meaning of analytical work. Here and there in such a book as Williamson's "Differential," for example, a geometrical illustration crops up. This seems to cause more difficulty than the analytical work it is intended to illustrate. Valuable hours are wasted by students over statical problems that depend upon some simple geometrical fact which they, unfortunately, don't know. The graceful solutions to problems in Dynamics and Optics, which depend upon geometrical properties of simple curves, are missed, and laborious analytical attempts disgust the student. Towards the end of his course he begins to depend upon the geometrical knowledge that he has picked up by the way, and to realize how much time and labor might have been saved had he only known these things before he came up to college.

I shall make no attempt to suggest any alterations ; my object is merely to point out a deficiency, and if you agree with me in thinking it is a deficiency, perhaps this matter may be considered when the regulations for '99 are being drawn up. And yet, I hope that Euclid will not be altogether discarded ; for, though his book is insufficient, yet it is unrivalled so far as it goes. It is the only example, with which I am acquainted, of a text book on any subject that has passed down the ages practically unchanged. English writers have followed very closely Simson's faithful translation of the original ; and it would be a rash act on the part of any body of men to finally discard The Elements and hope for better results. Yet something ought to be done, for the present state of things is a little absurd. We have an educational system in Ontario that has been quoted and copied far and wide. Again and again I have heard it referred to as a model when state educational control was being discussed in England.

The difficulty of entering the teaching profession is guarantee of the efficiency of our teachers. From the point of view of secular education our machinery is as near perfection as it can go. The workshops are ready and capable of turning out whatever may be asked for. It only remains for those gentlemen who draw up our Matriculation Syllabus, to spend a little time and thought upon drafting a scheme, that, without being unfair to the others, will give *our* honor men a better chance.

Is not this what we want all along the line ? At present we are driving every child in Ontario through one groove, and the result is many a square peg in a round hole. This process may be good for *little* boys but surely it cramps young men.

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## HISTORICAL ASSOCIATION.

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### *INAUGURAL ADDRESS IN HISTORICAL SECTION.*

W. HOUSTON, M.A., TORONTO.

The subject I have chosen to speak about is "The Educational Use of Historical Documents." By way of introduction, I would like to call attention to the great value and importance of History in educational work, not merely in relation to other subjects, on which it throws an indispensable light, but as a culture subject, and one of the best for that purpose.

Too much of the so-called culture work of the schools, partly from its nature, but partly also, from the spirit in which it is done, is limited to purely intellectual discipline, and is not effective even for that. History touches human nature on other sides, and opens up wider and more educative outlooks. As a species of literature it furnishes exceedingly attractive reading, and boasts among its creators some of the great writers of all time—Herodotus and Thucydides, Cæsar and Cicero, Livy and Polybius, Gibbon and Hume, Grote and Merivale, Froude and Freeman, Carlyle and Macaulay, Ranke and Guizot, are but a few names from the almost interminable roll of those who have made themselves famous. It is impossible for any intelligent and thoughtful person to follow the progress of the human race from savagery to civilization without being deeply affected by the unfolding of the great drama of human activity. Incessant conflict, restless energy, the victory of the strong, the doom of the weak, the march of invention, the division of the proceeds of industry, the betterment of social conditions, impart to this subject an interest that can attract to no other on the school program. History is from one point of view, a succession of biographies. We are all interested in the fortunes and achievements of great men, and of these history is the record. On its ethical side it affords an opportunity of studying the operation of moral law in relation to society, an indispensable complement to the study of its relation to the individual.

For purposes of intellectual discipline, no subject is better adapted than History properly taught. It is a good means of cultivating the

memory, its utility in this respect being so obvious that very often it is used for that alone; but it is equally useful as a means of cultivating the power of observation and reasoning; Every child born into the world comes into a sociological environment of some kind, and sooner or later he will be compelled to acquaint himself with its character. He may do this in ways injurious to himself if he is left without wise guidance ; he may do it in ways that will produce in him quite satisfactory results if he is properly trained and educated. Mr. Freeman has truly said that "history is past politics, and politics is present history." Politics is history in the course of evolution ; history is politics of which the evolution has been completed and which is known to observers only as matter of record. It is quite feasible to make the pupil or student carry on original and independent observation of social phenomena for the purpose of securing what is commonly called a "scientific" training, and the habit so acquired will be of the greatest possible use to him in after practical life. It is quite possible, also, to make him an original investigator of records by putting in his hands historical documents, to a great number of which we have comparatively easy access, and this number is constantly and rapidly increasing.

A very brief consideration will make clear some of the processes involved in the interpretation of documents, and will serve to show that, if the pupil is required to do the work, the culture will result, however erroneous his conclusions may be. There is first of all the verbal study of a text, which is closely akin to the study of a text prescribed for use as literature ; the meanings of terms, the logical structure of sentences, and the rhetorical uses of expressions, all come up for consideration. The historical background against which the document is fixed, calls for intelligent and careful scrutiny. It is impossible to understand the text of a charter, a treaty, or a statute, without some acquaintance with the state of society of which it was the outcome. And, not to go further in the enumeration, every great document is connected in history with the efforts and characters of prominent men, about whom we must always have vague ideas, unless we know something about what they said, as well as about what they did. There clings about every one of them some interesting association of heroic achievement, or personal authorship, or noble purpose, and all this is well calculated to deepen interest in history and promote culture by its study.

Scientifically, history should be studied from "now" and "here," backward in time and outward in space, and the proper way to take

up a chain of documents is to begin with the most modern, and take up its predecessors in the inverse order. To secure the most satisfactory results in the study of Canadian constitutional documents, the pupil's attention should be directed first to the British North America Act of 1867. An effort to master it will bring him into contact with many political phenomena which are already familiar to him, such as parliaments, courts of law, municipal corporations, the exercise of the various franchises, public finance, and public elections. So elaborate a system as the most superficial analysis of the Confederation Act discloses, could not have sprung into existence at once, and to make clear its origin, we are forced back on the one hand to the Union Act of 1840, and on the other to the evolution of representative institutions in the Maritime Provinces. The Union Act is similarly conditioned on the Constitutional Act of 1791, and that on the Quebec Act of 1774, while the very terms of the latter carry us inevitably back to the Royal Proclamation of 1763, and the Treaty of Paris of the same year.

To make the Confederation Act of 1867 intelligible, it is necessary to take a survey of the Constitution of the United States, and that cannot be understood without reference to the Articles of Confederation, the Declaration of Independence, the various abortive federal schemes prior to the revolutionary war, and the provincial charters governor's commissions, under which the original thirteen colonies were administered.

The historical documents of Canada and the United States, alike, are the outcome of still more interesting documents, of which there is a singularly perfect chain in British history. Every year there is passed by the British Parliament the "Army (annual) Act," which authorizes the exercise of military discipline, and thus prevents the use of the military power for unconstitutional purposes. In 1800 Great Britain and Ireland were united by Statutes passed concurrently by the parliaments of the two countries. By a similar process England and Scotland became Great Britain in 1707. The Succession Act and the Bill of Rights were the sequel to the Revolution. The Habeas Corpus Act of Charles II, was passed by Parliament to guarantee the subject against royal tyranny. The Petition of Right was a recognition by Charles I of the right of Parliament to control revenue and expenditure. The Statute of Treasons was passed to guard the subject against arbitrary punishments for undefined offences. During the reigns of Edward I and Henry III, there were frequent confirmations and re-issues of the Great Charter granted by

King John, and the Magna Charta itself was suggested by, if not an expansion of the Charter granted by Henry I, at his coronation, to secure for himself the good-will of the English people.

The more advanced student of history should be required to make some study of the actual documents which are the written constitutions of some of the nations of Europe, especially of Switzerland, France, Germany, and Austria-Hungary, sufficient material for which may be found in a good cyclopedia, or even in the well-known and widely circulated "*Statesman's Year-Book*." Needless to say that the student of international law, which is largely an historical subject, cannot dispense with the textual study of such treaties as have at once marked the conclusions of great struggles, and embodied successive changes in the states-systems of Europe and America.

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## COMMERCIAL ASSOCIATION.

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### *PRACTICAL PENMANSHIP.*

W. H. FLETCHER, KINGSTON.

Practical penmanship is not being taught to any considerable extent in our public schools. By practical penmanship, I mean a system of writing that will meet the demands of commercial and professional employments. Public school graduates cannot carry with them into business the method of writing they have been taught during their school course. Where they do the fact is written large in the almost illegible scrawl which records their business transactions and professional dealings, and is also painfully impressed upon their correspondents. Occasionally, great intellects become so engrossed in the evolution of ideas, that they neglect the mechanical work required to express their thoughts, and bad writing results. (This is the reason why we, who are here, sometimes write so poorly). But almost universally a bad system of writing underlies bad penmanship, and I submit that the system of writing taught in our public schools is not a good one. Consider what pupils are required to do with the avowed object of making them proficient in penmanship. The first year of their instruction in writing they spend in learning to form script characters by imitating or tracing their outlines. The second year a fairly accurate copy is required from them. The third year is spent in attempting to draw an exact reproduction of the headline copy and the nearer the pupil comes to accomplishing the result, the greater the joy of the teacher, and of his parents, and so the insane practice of attempting to secure accurate *form*, and *form* only, goes on for the fourth, the fifth, the sixth, the seventh, and possibly a few years longer. And what has been accomplished in the end? Has the pupil learned to write? Give the boy, or girl, several pages of foolscap and require a few pages of prose to be written from dictation at a commercial rate of speed, say twenty or twenty-five words per minute, and examine the product. The work is most likely to be an almost illegible scrawl, wholly unrecognizable as the work of the pupil whose copy you may have examined. And this pupil enters upon commer-

cial or professional life. Which of his styles of writing shall he find suited to the requirements of his work? Evidently neither; and to retain his position, or procure advancement, he must develop, perhaps at considerable expense, a style of writing which his public school course should certainly have given him. The fundamental mistake that is being made by our teachers is in teaching *form*, and *form* only, to the exclusion of the other essentials of practical writing, viz.: *movement* and *speed*. Good writing must ever have reference to the method of its production, whether it has been rapidly executed by a free, well-controlled movement, or laboriously drawn out by a cramped finger movement; because, after a certain degree of accuracy has been reached, the nearer the writing approaches the form of the engraved headline, the worse the writing becomes. Proper conception of the form is much more to be desired than the ability to draw the forms exactly.

For the last few years considerable attention has been given to this matter of letter *forms*, and the vertical system of writing has made a strong bid for popular favor. The authorization of a series of copy-books with vertical letter forms has tended to bring this style of writing into considerable prominence in our Province. The favor with which it has been received I believe to be due to its two prominent features, and to these only, viz.: superior legibility, and ease of acquisition by junior pupils. Its superiority over oblique forms in these respects can be pretty well established, and it will be a not uninteresting study to investigate the source of these qualities, and to ascertain what has been sacrificed to obtain them. An examination of the following sentence, taken from No. 6 copy of the authorized series, will make the task an easy one:—

“ Stone walls do not a prison make,  
Nor iron bars a cage.”

To make clearer the study, I have printed it in ordinary forms on the blackboard, and underneath these have written the sentence as it is in the copy-book. The similarity is very striking. The printed forms are seen to be vertical, legible, totally disconnected, incapable of being written, and such as require to be *drawn* at an eminently impractical rate of speed. The copy-book models are also vertical, legible and partly connected. Out of a possible thirty, only eleven connections are made, that is, over sixty-three per cent. of the junctions are omitted. The copy, then, may be about half written, must be half printed, hence is incapable of being executed at a practi-

cal rate. This comparison, then, should make it clear that our vertical writing gets its most commendable features from its close resemblance to printed forms, and that to secure its legibility and ease of acquisition by juniors, it sacrifices two essentials of practical penmanship, viz.: *ease of execution*, (which is radically different from ease of acquisition), and *speed*. The advocates of this style of writing are simply heralding the fact that printing is more legible and more easily learned than writing. And since it is almost universally conceded that teaching to print with the object of preparing for learning to write is time wasted it is somewhat difficult to understand how a system of penmanship, so closely allied to printing, could secure authorization for not only juniors, but for all grades of public school pupils.

The acquirement of a free movement is, I believe, universally acknowledged to be a prime necessity for the production of practical writing. Without it sustained speed is not possible, unless an amount of energy be expended out of all proportion to the requirements of the work being done. The different kinds of writing movements are so well known that I consider explanations of them unnecessary. As to the esteem in which each movement is held, the answers to the questions submitted to the Collegiate writing masters of the province are very instructive. Ninety-two per cent. of the replies named "combined" movement, and the remaining eight per cent. named "fore-arm" or "muscular" movement as being best suited to the demands of commercial and professional employments. Finger movement was mentioned only to be condemned.

Now, I submit that neither "fore-arm" nor "combined" movement is being taught to any great extent in our public schools, or even in our high schools, and until either is taught to, and acquired by the pupils of these schools, practical penmanship will not be taught therein. The teaching of practical penmanship, moreover, requires the expenditure of more energy than our teachers are accustomed to put into the writing lesson. If finger movement has been acquired in the lower classes the transition from that to "combined" or "fore-arm" movement means, for a time, more or less loss of accuracy in letter forms, and hence the teacher who would sacrifice the future efficiency of his pupils for present display refuses to teach the better system even though he possesses the ability. But the paramount reason for the prevalence of finger movement is found in the continued use of copy-books from the first to the last year of the public school course. I submit that copy-books, as the means by which pupils are to learn to

write, should be abandoned as soon as the pupil has gained a fairly accurate conception of the forms of the letters, for their continued use can but increase his ability to exactly copy forms, a qualification which will be of little or no practical use to him in writing. Their use after this period will in no way supplement the study of other subjects except, perhaps, drawing; because the copying of headlines requires no exercise of memory or other mental faculty. I know there are some who believe that because the headlines are statements of important historical, geographical, botanical or zoological facts, that the pupils, in writing these, must acquire information. Yes, possibly information, but not education, for the undigested information, casually acquired in this unassociated state will be remembered how long? Moreover, the writing of copy-books by senior pupils will not train but rather unfit for the requirements of business life, where the mind must be completely engaged in evolving ideas, arranging data, or remembering statements, while the hand almost automatically records the results of these mental efforts. The expensiveness of copy-books unduly wastes the time of pupils. It is a common practice to restrict the work of the writing period to a given number of lines and all the time is to be spent in executing these. Another very general practice is to have all the pupils writing the same heading at the same time, consequently again, all write the same amount in a given time, an absurd practice, surely. If senior pupils, who use the copy-books, were allowed to write them at a commercial rate of speed they would each require a new copy-book every two weeks, and a total of twenty each school year. Hence, you can see the necessity for teachers repressing any tendency in pupils to practice a utilitarian style of writing while using their copy-books. And further, I ask what is there in copy-book No. 4 that is not in No. 3, and No. 5 that is not in No. 4, and in No. 6 that is not in No. 5? The same capital forms; the same small letter forms; the same connections, or lack of them; practically everything the same, yet these several different numbers are put on the market and have to be used while the consumers pay for the extra expense thereby incurred. Finally, the accurate rendering of the copy-book headline requires for its execution the use of the so-called finger movement. This fact, an undisputed one, so far as I know, should of itself be sufficient to compel the disuse of copy-books by all who are training for professional or commercial pursuits. Now, while my study of this subject has led me to so unfavorably regard the use of copy-books in general by advanced pupils, my examination of the present authorized series of vertical writing copy-books by Newlands

& Row, has compelled me to point them out as particularly objectionable. Not that I am opposed to vertical writing, because I have used it for many years and taught it for several, but because, in the first place, I consider many of the instructions contained in the preface of each book to be most unsafe guides to teachers and pupils. If the pupil assumes the authorized position, with his "elbows hanging easily at the side," his desk must be so low as to put his writing line out of the range of his sight. If the fore-arm is neither in whole nor in part to rest upon the desk, neither the "fore-arm" nor "combined" movement is possible. If the writing line of the copy is to be kept from three to six inches from the edge of the desk finger movement is further compelled. The teacher or pupil who tries to put into practice these and other directions given must very soon reach the conclusion arrived at by the authors, and stated on the second page, viz.: that with our present style of school desks, free vertical writing is almost impossible. And standing out on the same page, as a satirical commentary on these absurd instructions is an illustration of the correct position for arms, hands, paper, writing line, etc., which contradicts in every essential feature the printed instructions of the authors. The series has been constructed with but little regard for economy as a comparison with another series of vertical writing copies produced in this city shows that the headlines give fully forty per cent. less practice in writing, and twenty-eight per cent. less than the authorized oblique series of copy-books.

Pupils are by this series hopelessly trained to disconnected writing of words. The system admits of no front joinings to a, e, d, g, o, or q, nor any rear connections with f, o, p, q, s, or y. As the authors say "Just enough breaks to train the writer to regard the joinings of little importance, etc," and that the writer is so trained take this as the specimen of a pupil who mastered this system so thoroughly that he was awarded a gold medal for his proficiency:—

H a y s   l o o k e d ,   b u t   h e   c o u l d   n o t   s e e   a n y t h i n g  
w i t h o u t   r a i s i n g   h i s   h e a d ,   a n d   t h a t   w a s   t o o  
d a n g e r o u s   f o r   t h e   s h a r p s h o o t e r .

A close examination of the system reveals several other objectionable features, but I prefer to go no further into details. To those who are interested a personal examination will be more satisfactory.

And now a question that will very naturally suggest itself at this stage of my paper is:—What shall take the place of copy-books in advanced classes if we decide to do without them? The answer has

been largely suggested already. Teachers who know, practice and can teach a practical system of penmanship are the prime requisites. These should be ably assisted in their work by the demands of inspectors for positive proofs that practical penmanship is being taught. As a further aid to teachers and pupils, I believe that we need a text-book of practical lessons on penmanship. In brief, my conception of such a text is one that would begin by illustrating and requiring practice of the fundamental exercises required for "fore-arm" movement writing. From these movement exercises, and others related to them, would be developed the whole alphabet of capital and small letters. The letter forms would be neither vertical, nor have a main slant of  $52^{\circ}$ . Observation of the writing of accountants or any class of persons who do a great deal of writing, almost invariably shows that their letter forms have about  $75^{\circ}$  or  $80^{\circ}$  slant. They have not tried to obtain this degree of slant, but I believe it to be the natural outcome of the demands made upon them for both legible and rapid work. This degree of obliqueness admits of sufficiently rounded turns for perfect legibility, (and it is rounded turns that give legibility to penmanship) and permits rapid, compact formation of the matter to be written. To each lesson would be appended a series of exercises to give practice of each letter developed. The whole text would be carefully graded and very fully illustrated, preferably from pen-written copies. No space would be provided for practice by pupils, as all their work would be done in books or on paper apart from their texts. The use of such lessons by our teachers would make it more possible for them to *teach* writing. The pupils would acquire a free, hygienic movement and develop the speed necessary for other school work. One book of lessons would be all that a pupil would require during his school course, and should cost no more than one, or, at most, two copy-books. Practice paper can be bought at an exceedingly small fraction of the price charged for the paper of copy-books and its use would result in a considerable saving to pupils and parents. But some one says cannot practice paper be used in conjunction with copy-books? It certainly can and is so used in our best schools, and just in proportion as copy-books have been abandoned and practice paper substituted has the writing of the pupils risen from the impractical to the practical.

Now, in conclusion, I make no apology for giving so much attention to what may, at first glance, seem matters for the consideration of public school teachers only. High school and Collegiate teachers begin where public school teachers leave off and they are the best

judges of the efficiency or inefficiency of the teaching of writing in the public schools. It is a matter of very serious consideration to these whether or not pupils come to them with an impractical and almost an ineradicable style of writing. Teaching energy that should be expended in developing speed and freer movement often has to be exerted in ridding pupils of objectionable habits acquired in junior classes.

At our last annual meeting we deemed it fitting to place on record by resolutions adopted, our opposition to and disapproval of the use of finger movement in any system of writing. With the added experiences of another year I hope we are prepared for further action to secure better teaching of writing in all grades of our schools. What shall it be?

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*THE STUDY OF FINANCE.*

W. A. DOUGLAS, B.A., TORONTO.

IF we go back to the middle of the last century and take a survey of the condition of science, what a contrast do we find between the state of knowledge at that day when compared with that of the present time. Since then we have had the invention of the steam engine and its thousand progenies. Man has invaded the domain of nature; he has explored her secrets, laid under tribute her powers, and made her forces the servants of his will. Power has been added to power till men now wield forces of which our fathers scarcely dared to dream.

But the power that constructs may destroy, the steam that impels may explode. Wisely guided, power leads on to fortune; unwisely guided, the greater the power, the greater the possibility of disaster.

In the same year that James Watt gave to the world the steam engine, by a remarkable coincidence, Adam Smith wrote the "Wealth of Nations," and thus pointed out, in a degree, how men could best control that power for the benefit of the race.

Hitherto humanity has given its greatest encouragement to the inventive genius that would add one cubit to the stature of productive agencies, but it has given only the smallest encouragement to the enquiries that deal with the proper regulation of these agencies.

How shall we properly control the powers that enable men to live, move and have their being, so that each man shall have the fullest opportunity for the development of all that is best in him? This is the inquiry that constitutes the study of Finance. There is a narrower sense which would confine this subject to the special study of the methods of Banking, Stock-Jobbing, etc. At the present time I shall consider it wholly in its wider scope.

While our educational institutions have been giving the bulk of their energies to the study of dead languages, mathematical analysis, or physical phenomena, to this one, the most important of the sciences, there has been assigned only a very subordinate place. And yet, when we consider all the consequences involved in an adequate knowledge of this subject, nothing in the whole curriculum of studies is more deserving of the most careful attention.

Finance involves transactions in wealth. The first thing, therefore,

that the student should learn, is to recognize what this term "wealth" involves. It is not enough that he should be able to define it.

The order of nature is always recognition first and definition afterwards. It is vastly more important that the student should be able to recognize correctly than that he should be able to define correctly. Any failure here may be fatal to the utility of this study.

Wealth may be discussed from two stand-points: first that of the individual; second that of the community. The first asks, "What is a rich man as contrasted with a poor man?" The second asks, "What constitutes the wealth or poverty of the community as a whole, and what are the forces that determine its distribution?"

Wealth and poverty are the opposites. The one is positive, the other is negative. If we can procure abundance with little effort then we are wealthy; but if we have to give great effort, and then obtain only scarcity, we are poor. This may be represented mathematically as follows:—<sup>product,</sup> <sub>effort.</sub> Increase this ratio and we increase wealth, diminish this ratio and we diminish wealth. It is by no means sufficient, however, that the teacher should lead the student to deduce this formula; he must be drilled in its application again and again by repeated illustrations till he can apply it with readiness and accuracy.

This formula, however, by no means constitutes the most important lesson in the recognition of wealth; for the idea of wealth is so associated with value, that most people regard them as identical, and comparatively few ever take the trouble to distinguish between these two things. On the importance of this distinction we cannot place too much emphasis.

If I were asked the question, "What, in your opinion, is the error which is fraught with the greatest disaster, which stands most in the way of the progress of civilization, and all the blessings it involves?" I would answer without hesitation, the confounding of wealth with value. This error is not confined, by any means, to the unlettered classes. It prevails and dominates everywhere, just as disasterously in the councils of the most renowned statesmen, as in the hovels of boors.

Paris was besieged by the Germans. Military rigor sealed every entrance to prevent the admission of food to the starving inhabitants. Frail ladies, accustomed to every delicacy, were compelled to subsist on food from which they would have turned away with disdain in their better days. What would they not now give for a tasty meal, however plain? The value of food had risen enormously.

Was that increased value an indication that the people of Paris were richer in food? Not by any means, but the contrary?

"A thousand pounds for a seat in that boat," cried in despair a lady on a sinking steamer. Was the increase in the value of that boat an indication of increased wealth in the means of escape? Not by any means. It was exactly the contrary. There was terrible poverty in boats at that juncture.

In examples simple as these, where the truth is so apparent, that increase of value is not always an increase of wealth, there is not much danger of error; but when we come to wider generalizations, then the public are not discriminating, and fallacies most disasterous dominate the popular judgement.

If we watch the growth of any city we can notice two concurrent movements. With every addition to the population there is a corresponding increase in the number of houses, stores, goods, machinery, etc. If, therefore, we follow the assessment of that city through a series of years, we find an increase in the aggregate value of the houses and other labor products. This increased value is concurrent with an increase in the quantity of these commodities, and, therefore, is an indication of increased wealth. But if, on the other hand, we measure the quantity of land available for each inhabitant, then we find that there is an inevitable diminution of the quantity. The area for each grows less and less. The garden shrinks to the lawn, then the lawn is appropriated, and continuous blocks appear, which in their turn, are replaced by tenements with numerous families living in stratification, one over the other. The one thing in the city in which we must exercise greater and greater economy is land. In that commodity people inevitably become poorer. But with every diminution of the area the value advances till it reaches enormous figures; in Toronto one-and-a-half million dollars per acre, in Chicago from five to eight million dollars per acre, in New York from ten to thirteen million dollars per acre, and in London, England, it has sold as high as the rate of thirty million dollars per acre.

The increased value of the buildings is concurrent with an increased abundance of buildings.

The increased value of the land is concurrent with increased scarcity of land. The first indicates an increased number of valuable units, no one of which is dearer; the second indicates no increase in the units of foot area, but an increase in the value of each square foot.

The first is a value of extension, the second is a value of intention.

The first indicates increased wealth, the second indicates increased poverty.

And yet, in nearly all legislation, these two values are confounded, and they are both classified as wealth.

As the accountant is trained to distinguish credits from debits, and liabilities from assets, so the student should be able at once to distinguish that the one value indicates the assets of society, while the other value indicates its liabilities.

The values caused by labor in commodities are to the values caused by the community to land as plus is to minus, and in our social adjustments this distinction should never be lost sight of.

The differences between these values can be imparted to the student, with great advantage, by means of diagrams and parallel columns.

#### INCREASE OF VALUES.

##### *In the case of Labor Products.*

Extension, more units, no unit dearer.  
Increased wealth in goods.  
Cause, individual energy.  
Duration, Transient.  
Reducible by machinery, etc.  
Sustained only by continuous toil.

##### *In the case of Land.*

Intension, each foot dearer.  
Greater poverty in land.  
Communal organization.  
Perennial.  
Not reducible by machinery.  
Continues without toil.

#### SPECIALIZATION OF FUNCTION AND EXCHANGE.

Of all the factors that have contributed to the progress of humanity, perhaps there is none more important than the specialization of functions. What this means, why men everywhere voluntarily select special occupations, what relationships it gives rise to, every student should be able readily to demonstrate. He should be guided step by step to see how men, in seeking their own interests, voluntarily develop special skill, and adapt their toil to their surroundings, in doing this they confer their greatest benefit on their fellows, and beget blessings inestimable: and, further, how this leads to world-wide commerce, exchange or trade, thus bringing communities into relationships of mutual enrichment.

By successive steps he can thus be trained in the proper method of investigating financial or economic phenomena. He will thus see that this method of specialization leads humanity into closer and closer dependence, association and co-operation; that only under such a system could a Newton make his brilliant discoveries, a Leibnitz develop his philosophy, or a Watt invent his steam engine; or that only under such a system could we enjoy a railroad, a newspaper, and the innumerable other advantages of organized society.

To emphasize these truths, let him imagine what would be the condition of humanity without this method of specialization and co-operation, with each man compelled to make his own hut, his own clothing, his own food, to work out his own philosophy, science and religion. It does not require a genius to understand that under such a state civilization would be an impossibility, and man would be bound in the thralls of the deepest barbarism, if he could possibly exist at all. Thus the pupil could come to realize what an inestimable blessing society is to its members, and he might also easily realize the truth of the apothegm : " In isolation no animal so helpless as man ; in association no animal so powerful."

It is not sufficient, however, that he should see that this system is essential to the existence and advancement of civilization ; but he should be taught to analyze and to show why and in what way it does so. It is the absence of this careful analysis that makes instruction in this department often so inefficient and worthless.

It is not a great calamity that the student should be ignorant of the construction of the thermometer, or even the structure of a flower, beautiful as that knowledge may be ; but it is one of the greatest calamities that this wonderful mechanism of the social forces should be left to the guidance of ignorance and quackery, to the guidance of men who know not the simplest elements of correct economic analysis. He should be able to show without hesitation what this specialization of function means, how far we can leave it freely to develop and extend, whether it comes with its hands full of blessings to be received with the heartiest welcome, or whether it comes as a disastrous flood, or an inundation from which we must save ourselves as we would from a visitation of locusts or an invading army.

The relationship of various agencies to exchange may be advantageously exhibited by contrasted parallel columns.

#### AGENCIES THAT AFFECT EXCHANGES.

##### *Those that facilitate.*

Roads, railroads, steamships, etc.

Peace.

Currency, banks, bills of exchange.

Security, honor, integrity.

Freedom from legislative interference.

##### *Those that impede.*

Muddy roads, gorges, mountains, etc.

Wars, blockades, sieges.

Absence of, or defective currency.

Insecurity, robbery.

Legislative interference.

#### EXCHANGES, TWO KINDS.

All maples are trees ; but it does not follow that all trees are maples. Trade is exchange of values ; but it does not follow that all exchange

of values is trade ; for trade is one thing, and tribute is its opposite. We have seen that values are of two different kinds, one is the result of industry adding utility, the other the result of increased population making lands, mines, forests, and other natural gifts more scarce.

The exchange that begets mutual benefit is confined wholly to the values that result from industry. Two producers beget valuable commodities, and by the exchange render each other a service of mutual benefit, of mutual enrichment. That is trade.

But when a man holds a piece of land which has grown valuable, not by anything that he has done, but because of the growth of population, or by public improvements, then, if he gains riches thereby, he does so only by the impoverishment of the men who produced the riches ; for, if a man gets a crop without producing a crop, the man who raised the crop must go without.

This is not trade, it is tribute.

Product for product is trade, crop for crop is mutual beneficence. It is to complete this exchange that mankind have devised all the appliances of railroads, banks, currency, etc.

This exchange tends to equality, it tends to keep producers on the same horizontal level of enrichment.

But when a man rises to higher and higher fortune yearly, because land has become more and more scarce, then the relation between him and the producer tends, not toward equality, but to inequality, the one is elevated, the other is depressed ; the greater the fortune of the one, the greater is the obligation of the other. The movement is not towards a horizontal elevation, but to a vertical separation upward and downward.

By a powerful impulse, resulting from the instincts implanted in the mind by the Creator, man is ever pushing forward to greater and greater conquests in the utilization of the forces of nature, devising improvement after improvement, so that fabrics of cotton or wool can be sold to-day at one fortieth of the cost of a century ago, transportation at a hundredth of the cost, and steel at a thousandth of the cost.

On the other hand, land values, in many cases, have risen a thousand fold.

Land values ever advancing, labor values ever declining, the obligation of industry ever growing larger, the values in which that obligation must be met ever tending downward, we have here the problem that must be solved, if civilization is to advance as it should.

To impress this still further I would again suggest the contrasted columns.

*Labor and Ingenuity strive to make*

Products abundant,  
Prices cheap.

*Population tends to make*

Land scarce,  
Price dear.

Improved machinery, increased knowledge, better organization, all these agencies should lift the whole of humanity to a higher level, to nobler conditions in civilization. But let any agency be misapplied and disaster must result. The fire that warms our homes may lay them in ruins.

The rapid and enormous growth of cities is one of the most remarkable phenomena of the present age. What is the peculiar function of the value of goods that is caused by individual effort, and what is the proper function of the value of land that is caused by the conjoint presence of the community? These are questions the importance of which cannot be over-estimated.

We may beget a civilization that will as far outshine the present as present outshines that of the dark ages. How this is to be brought about we can learn by the study of Finance.

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## PUBLIC SCHOOL DEPARTMENT.

### *THE CHAIRMAN'S ADDRESS.*

W. E. GROVES, TORONTO.

During the past year the regulations of the Education Department have undergone revision, and I am sorry to say that many of the recommendations of this section of the O. E. A. have been overlooked in such revision. It is not my intention to enter upon a discussion of what changes have taken place in the course of such revision, further than to call attention to the fact that our opinions are evidently not held in much esteem; and the object of my present address is to indicate what seems to me the most evident reasons for such lack of influence, and to indicate a line of action, which, if persistently followed in the future, may lead to a fuller recognition of what this section of the O. E. A. represents in the teaching profession of the country.

It would be a somewhat useless task to say that this section is the sole representative of the 8,000 teachers engaged in teaching the public schools of this province, and that all the other elements engaged in active teaching constitute but a small fraction of the number represented in active Public School work. It is an obvious fact, however, that the infinite fraction represents an influence, as compared with ours, which might be indicated by the cube of the reciprocal of that fraction.

Without further introduction or preface I shall now point out what I consider the chief causes which led up to such a state of inesteeem, (if I may be permitted to coin a word), and to give a proposed solution for the unsatisfactory position held by our section in the Educational Councils of the Province.

First of all, let me submit that, in my opinion, the greatest drawback we have to obtaining an influential standing in the eyes of both the Education Department, and of the public, lies in the lack of permanency in the *personnel* of the corps of Public School teachers. Secondly, in the lack of security in tenure of office of the public school teachers. In the third place, and arising from the other two,

lies the lack of individual interest in the workings of our educational institutions. Next I would place the fact that our section is representative of individual opinion, and not of the opinions of the public school teachers of the Province. Fifth, we are not in close touch with the Public School Inspectors' Section. In the sixth place, we may charge the lack of permanency in the membership in the public school section of the Association. I must say in the seventh place, that I regard the separation of the Model School Masters from this section as a mistake when viewed from the standpoint of the influence of the section. And lastly, and covering them all, must we charge the lack of professional spirit among our teachers as being responsible for a great measure of our lack of weight in shaping the course of educational events.

To consider these several points somewhat in detail, let us treat of lack of permanency in the *personnel* of the Public School teachers of the province. We are all aware that the average teaching life of our Public School instructors is lamentably short. During the course of the exhaustive, and in many cases exhausting, correspondence within the past four or five months, directed against the management of the Education Department, it has been frequently stated that the average length of service of the Public School teachers of the Province is four and three-quarter years. When we consider the length of service of many of the teachers of the city and town schools, where the tenure of office is much more secure than in the rural districts, we may see that, in rural districts, the average length of time spent in the profession falls very short of even the four and three-quarter years given as the general average. Now, if the tenure of office is so limited, how are we to expect much weight to be attached to the professional opinions of our section? The ordinary teacher is scarcely initiated into the mysteries of marking the daily register and ringing the hand-bell at the appointed hour before he finds his occupation gone, and, perforce, a younger and fully inexperienced hand has to go through the acquisition of the daily routine just acquired by his predecessor. Just at the point when the teacher has made himself master of the mechanics of his profession and has reached a stage of advancement when he might be expected to look out upon the professional field before him, he finds himself out of the profession, and a new apprentice has to go through the mechanical processes that a more experienced teacher has just acquired, and, which must be acquired, before he can be in a position to view his occupation professionally. He, in turn, must, within a few years, nay, a few months, in some cases, make way

for another, and so on till we are reminded of Tennyson's Brook, "Men may come and men may go but this goes on forever."

Next, let us enquire why this shortness of tenure. The causes are various, and it may be that I shall only touch upon the superficial, without touching the real causes, but I shall make the endeavor, notwithstanding.

(a) The ease with which aspirants may enter the profession. (b) the general use that is made of teaching as a means to entering upon one of the other professions, of law, medicine, theology, to say nothing of dentistry, pharmacy and the calling of the veterinary surgeon.

To deal with both of these causes together, it is only necessary to say that all the time spent in literary preparation for matriculation into any of the learned institutions is also the time necessary for the literary or non-professional requirements for a Public School teacher. Now many a young man, in his mind, sees before him a distinguished university or professional course, were he in possession of but a limited sum of ready money. At no manual or skilled labor in which he could engage would he be able to make, as an inexperienced experimenter, the same remuneration which he could at teaching, besides the amount of spare time at his disposal, in which he can prosecute the line of study on which his heart and mind is set. A three months' course at a County Model School and his professional certificate issues, and he becomes an additional competitor in the teaching market. To him a situation is all important, and a matter of a few dollars, more or less, is not an all important consideration—but a situation he must have. To the average trustee of the rural section, where the chief qualification consists in a willingness to accept an office no one else will accept, it is not a matter for surprise that they should engage their teachers on much the same plan that they buy wheat—we will buy from that man who will supply the *grade* we require at the lowest price. The man (probably with a family) who has resolved to make teaching his life work is crowded out, and the profession and country lose the services of such an one, that, forsooth, some aspiring school boy may have an opportunity to earn, in the easiest manner, the few dollars necessary for his future professional course. When drastic remedies are proposed we are told that you would be shutting out many deserving young men or women, but I would say, if teaching is to be turned into a charitable institution, would it not be infinitely more honest to ask us for a contribution, in the name of charity, and let us and the country alike profit by the permanency thus secured.

Now for the remedies proposed (a) Raise the age limit to twenty-

one years ; (b) increase the Model school term to one year ; (c) the separation of the purely teachers' examination from the examinations provided for Form promotion or University Matriculation. (See Mr Spence's paper).

The raising of the age limit and the increase of the Model School term would deter many from entering the profession who wished merely to make a small addition to their available funds only to leave as soon as the temporary end was served.

Let us now touch upon the lack of personal interest. As already said, whatever leads to greater permanency in the *personnel* of the profession and greater security of tenure will lead to increased interest. These are slow operations, like all reforms, and our Association may be interred before the educational awakening necessary to preservation arrives. Towards increased interest I would say we ought to institute a literary campaign. We should secure the co-operation of the Inspectors in the placing of our literature. We should have a permanent committee, whose duty it would be to place before the individual teachers the claims of our section upon the interest and co-operation of every teacher employed in Public School work. The committee would require to be a permanent one, since the frequent changes in the *personnel* of the profession means practically a new constituency every four or five years, so that the work done by the committee of this year would not only run considerable risk of being forgotten a year hence, but would never have reached one-fifth of the teaching constituency. Should this recommendation meet your approval I would suggest the immediate appointment of such Committee, so that, if possible, they might formulate a plan of action for the consideration of this meeting before our adjournment on Thursday. To give an increased personal interest the several Teachers' Institutes of the Province might, at the annual meeting, elect, say, five or six members as representing the opinions of the teachers of the Inspectorate. The names of these representative teachers would be forwarded by the Inspector to the Education Department to be placed on the mailing lists of the Department. To these teachers would be sent copies of all proposed changes of regulations, etc., for their opinions, as is done for the Model School Masters, and the Head Masters of the High Schools and Collegiate Institutes.

Let me now consider the non-representative character of our Section. Of course, the weight of any opinions put forward as representative of the opinions of a class will depend in a great measure upon the degree in which those opinions are representative

or individual opinions, as conceived by the person or body to which the representations are made. Should I go before a railway manager and express to him certain opinions as voicing the discontent of the patrons of the road, and suggest to him a changed line of action which would meet the approval of the travelling and commercial public, his action would depend altogether upon how far he felt that I rightly voiced the public dissatisfaction, and what was the ability of the public to help itself should he fail to meet the representations for reform. Just so in our own case.

That our Section represents but a small proportion of the Public School teachers of the Province goes without saying. We do not average at our various sessions one per cent. of those engaged in active teaching, and if we take away the purely Toronto element, the percentage shrinks into still further insignificance. Were our Section composed only of such teachers as were delegated by their several Inspectorial Institutes, the meagre representation could not be complained of, but, as we are now constituted, all teachers who choose may come, and with the doors thus thrown widely open, yet a beggarly one per cent. is the best we can do. Have we any right to complain when the Minister courteously, or curtly, sets aside our representations, believing that they are but the vaporings of a few local busy-bodies, whose vanity finds this a pleasant outlet for their Easter holidays?

To demonstrate just to what degree our Section is representative or individual, our secretary is; upon the present occasion, keeping a record of particulars of the teachers in attendance upon the meetings of this section, which will show the Inspectorial Division, and whether the delegate is here as representing his Association, or in his individual capacity.

Another thing, that gives the various High School sections added weight with the Education Department, is the close contact preserved between the Department and the High Schools and Collegiate Institutes through the High School Inspectors. Naturally, the Minister expects the High School Inspectors to be *au fait* on all subjects relating to High School work, and similarly he looks to the Public School Inspectors for information relating to Public School legislation. But, I would ask, what effort has been made to impress the Inspectors with the importance of our views? Resolutions are prepared and carefully considered in our section. A deputation waits on the Minister—weary, it may be, from departmental work, and worried with the species of bear baiting indulged in by anonymous scribblers

—our views are presented. With as much show of interest as a man can well call up, they are listened to. "Your Secretary will favor me with a copy of your resolutions," and "I shall give them my best consideration," and practically that is the last impression the Minister has of the importance we attach to those recommendations. He has a bare copy of the resolutions, but of the arguments which induced you to accept such as expressing your opinion, the Minister has none. How different it *might* be were those recommendations considered in council with the Inspectors!

A lack of permanency in the membership of the Public School Section is another fruitful source of lack of influence. From year to year the membership is a greatly varying quantity. We see so many faces for just one meeting then we see them no more forever—they have passed as completely from our ken as if they had never been. This, to some extent, arises from the practice of County Institutes sending up a new representative year after year. The position of delegate is looked upon largely as an honorary one, and the Association passes the honor round, thus unconsciously perpetrating upon the Association the same lack of permanency in membership that characterizes the profession as a whole. That it should be so is a pity. Just when a delegate has learned how business is conducted, and has learned somewhat of the aims of this Association he is relieved from duty by his constituents, and a new man commissioned in his stead. In this place I would urge that greater permanency of membership be secured through County Institutes and *every* County Institute being recommended to send the same representative for a term of two or three years, and to send none but *bona fide* Public School teachers as their representatives.

We now reach the question of the separation of the Model School Masters from the Public School Section. This, I think, was a mistake both on their part and on ours. On their part it was a mistake, for, though Model School Masters, they never ceased to be Public School Masters. Whatever legislation affected the status of the Public School also affected them. But associated, as they are now, with the Normal School Masters, their attention is given almost wholly to the specific work of the Model School, which, at best, occupies but fourteen weeks. While thus busied with the weighty affairs of the fourteen weeks they overlook the legislation which concerns their schools for the entire forty-two weeks, or scholastic year.

On our part, we lose the permanency of membership which would arise from the attendance of the same people year after year—for the

Model School Masters are good attenders. Our section loses in that continuity of policy which such permanent membership would give it. We lose, too, the counsel of such experienced men as constitute the bulk of the Model School Masters; and in the eyes of the Education Department, we lose caste, for, surely, all the brightest intellects in Public School work must be found in the Model Schools.

I do not mean to say that we should endeavor to arrange for a legislative union of the two Sections, but it does seem wise to me that one session of our meeting should be devoted to a joint consideration of such matters as concern the schools as a whole, the consideration of say resolutions from the three sections most directly concerned with the work of the Public Schools, namely, the Public School Section, the Inspectors' Section, and the Model School Masters. It cannot but be apparent to all that recommendations approved by the joint body would have much greater weight than when put forward by any one of the Sections singly.

I have now reached the last of my indictments, that is to say, the lack of professional spirit among the teachers themselves. This is something so generally known that I need scarcely more than refer to it. To discuss it would be fruitless as it would require a full paper to deal with this topic alone, and I might suggest this as one of the topics which might be taken up at a future meeting, where the subject can be treated at length, and possible remedies suggested.

In conclusion, permit me to thank the members of the Department for the patience necessary for hearing me through, and for the honor done me in electing me to the position of Chairman of this Department. I only regret that, during the tenure of office, I was not able to do more to advance the interests of the Department, and can only hope that your choice of my successor may be more fortunate than your last.

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*THE CRIMINAL AND HIS RECRUITING GROUNDS.*

E. J. PRESTON, OTTAWA.

Civilized society, naturally divides into two sections: the normal, or social, and the abnormal, or anti-social. A person who respects the rights and feelings of his fellows is a normal individual.

The criminal belongs to the anti-social class. Havelock Ellis defines a criminal as one "who fails to live up to the standard recognized as binding by the community." Lacassagne says: "Crime is a microbe only dangerous when placed in a fermenting medium, and every society has the criminals it breeds." It presents a puzzling problem to social educators. Some cry "educate the masses," others plead for "prohibition;" socialists clamor for a "re-distribution of wealth," and the Church asks for "Sectarian Schools."

It is now studied under the name of criminology. We speak of crime as being against the Person, or against Property. Prof. Crafts, of the Reform Bureau, Washington, says there is a rapid increase (in the United States) in crime.

In Canada crimes against the Person are decreasing, but Insanity and crimes against Property are increasing, the former to an alarming extent, particularly in Ontario. Criminology has divided into two schools: the Theological or Spiritualistic, dealing only with the moral or spiritual, claiming that the love of pleasure, the dislike of work, a shirking of responsibility, struggle or sacrifice, lies at the root of crime, and the remedy lies in training the idle and shiftless to practice these virtues.

The Material or Anthropological section argues that crime is the result of natural or physical causes in the individual through a reversion to an earlier and more primitive type of being, and is often called the Atavistic theory. To understand the criminal we must study all the cosmic, social and biological influences to which he has been subjected.

We will briefly look at him from the physical, mental and moral point of view. Man's lower nature dominates the higher by vice and by crime, but we must not confound the two.

The law divides criminals into three classes: first offenders, recidivists and professionals. Criminology divides them into five: First, Political criminals; Second, Criminals of passion; Third, Occasionals,

Fourth, Instinctives ; Fifth, Professionals. The first and second we may omit. We will class the others as those who, with fairly good morals, have, by circumstances, been forced into crime. The weaklings, instinctives and habituals, presenting signs of reversion, need a more careful study.

Beggars, paupers and tramps belong, in general, to the weaklings. Their number is increasing, and they form a large criminal nursery. They are generally illiterate. Epilepsy is common among them in some form. To a certain extent they are instinctives ; from some cause they have perverted or stunted moral natures.

The increasing responsibility, which the changing conditions of this century is throwing more and more on each individual for him or her self, is building up, on the one hand, a race of strong, self-reliant men and women ; but on the other, operating on the weaker and more irresponsible, causes an increase of insanity and crime. The Occasional criminal is not of a strong animal nature, and his crimes, at first, proceed more from weakness.

All authorities agree that parents addicted to alcohol (even in moderation) are more likely to bequeath to their children idiocy, epilepsy, insanity or criminal tendencies, than total abstainers. Alcoholism shows a kind of degeneracy. Some writers speak of it as incipient insanity, and state that persons are often saved from lunacy by irregular or periodical fits of drunkenness. "Alcoholism, in either of the parents, is one of the most fruitful causes of crime in the child," (Ellis). The parents of a large percentage of criminals were shown to have passed the prime of life before the birth of those children. Out of a 1,000 murderers, examined by Dr. L. Downs, fifty-three per cent. had elderly fathers.

One writer states that crime, like drunkenness, is often the method by which nature seeks to escape inherited epilepsy or insanity.

If we admit that all crime proceeds from one who is unlike his fellows, we must inquire to what extent he is responsible for that divergence, ere we decide on his punishment.

There is no distinctive appearance pointing out the criminal, but there are certain signs indicating a defective organism. These are often seen among city pupils : a pallid or pasty complexion, denoting a poorly-nourished body, or imperfect circulation : a shifty, hunted look in the eye, or a dull, uninterested stare, especially when under reproof. They cannot be made to admit being in the wrong ; they are insensible to remorse, and often physical pain ; sometimes bright and clever, but

dishonest and untruthful. These are instinctives, and I found, in most cases, an epileptic strain in the family.

Among weaklings and instinctives we often find some part of their physical structure out of proportion. Very large, or very small heads are common. Race difference in skull formation is more pronounced. The cone-shaped, or the flat top, being so often found, point to a degeneration in the individual. In ordinary persons the right hand is generally the longer, while in criminals the percentage is much lower, and thirty-five per cent. of pickpockets have the left the longest. Ambidexeters and left-handed persons are very common among them. Webbed-fingers and toes, faces not developed the same on each side, ears and eyes not the same shape or color, and a keen sense of smell, are often met with.

Paper money has a peculiar odor, and a dishonest mail clerk can detect the notes inside a letter in this way more readily than by touch. I have been most struck by the extraordinary keenness of sight of some pupils, and in every case a dishonest one.

Color-blindness, though common among ordinary men, is rare among criminals.

Great flexibility of body, and remarkable agility are also found among them.

Over forty per cent. of the criminals in Southern Europe tatoo their bodies, though a forger or swindler rarely thus decorates himself.

This tendency to mark their persons may be seen in children, but an evenly-balanced child seldom does so. Nothing seems more certain than the heredity of crime. "There is no doubt whatever that the criminal parent tends to produce a criminal child," says Prof. Ellis. At New York State Reformatory fifty-three per cent. of the convicts came from criminal or dishonest families.

From my own observation I am led to think that evil tendencies are more hereditary than intellectual or moral ones. Other crime-producing agents are ignorance and illiteracy, but I question whether illiteracy alone, in this country, is responsible for all the evil laid to its charge. Illiteracy produces poverty, which gives a sense of injustice that may lead a strong nature to deeds of violence, but we do not find the poorest nation, community or family the most dishonest; the reverse is generally the case. The main factors in poverty which produce crime are the influences exercised by it over the young, especially among an urban population. Judge Cornell, and Chief Inspector Brynes, of New York, both think the cheap and crowded

lodging-houses, with their contaminating influences, are crime's favorite recruiting ground. But in this country, at least, careless, shiftless or drunken parents forcing the child to the street for its comfort or amusement is a more powerful agent.

In ordinary society, the growing laxity of parental control, the desire of parents to throw the responsibility of training their children on the Public School and the Church is, perhaps, the strongest current flowing crime-ward. Many parents will bring children into the world handicapped by evil tendencies, turn them loose, and look to the Church, the school and street to do the rest. And the street is a wonderfully clever teacher, and intensely loved by its pupils. Under its tuition they rapidly graduate, and pass on to that "Black Flower of our civilization," the jail.

Few persons reform after twenty-five, and it might be wiser to devote our attention to the more youthful.

One of the greatest incentives to crime is the uncertainty of punishment. The criminal is like a child, and if there is the faintest chance of escape, he will take the risk. But if there is no doubt of detection and punishment, he is less likely to break the law. Some years ago it was not safe for a person in Canada to commit a serious crime; but we are in danger of allowing our laws to wax loose. We seem now not to consider a person's guilt or innocence so much as the ability of his counsel. A criminal with wealth or influential friends may carry his case from court to court, and finally escape altogether. If a man deserves punishment let not wealth or legal quibbling save him. If our laws are too complicated let them be simplified, if the death penalty is only an obsolete clause on our statutes let it be abolished. But if it is still necessary, we have the right to demand that it be not lightly tampered with. In the United States it is the exception when a criminal gets his deserts.

The same laxity, which is invading Canada, has over-spread that country. For the last twelve years their average yearly lynchings were 167. In 1896 there were 10,652 murders. To atone for these the state executed 122 persons, but the "Honest Electorate," with unwashed hands, lynched 131. Now that is a sad travesty on our civilization. And eighty-three per cent. of their people are educated. There seems to be something wrong. Has this fact any bearing on the question?

Mission returns show that of their seventy millions, twenty-five millions never enter a church door; one state has three millions who are really Pagan as far as any religious belief is concerned. It is stated that they have more suicides than other any country, and,

as I said before, a person may, with impunity, kill forty-one of his fellows, and escape the gallows.

These eruptions show the deadly nature of the disease which has commenced its ravages in the national life, and should give Canadians food for thought. I care not what a man's religious belief may be, if he only lives up to it. The danger to an individual, community or nation is having no religion, believing in nothing.

The Anglo-Saxon, being of a cautious nature, is not prone to deeds of violence. But his almost Jewish acquisitiveness leads him to crimes against property, as embezzlement, forgery and fraud of all kinds, and these are increasing in Canada. As our gold areas develop, and immigration increases, we may expect crimes against the person to increase also. The minute, disgusting way in which crimes and horrible events are dwelt upon in the press has a fatal fascination for weak-minded persons. An epidemic of any form of vice or crime may be often traced to the publicity given to the first in the series.

Through the demoralizing tales read by thousands of our youths in books and papers which are permitted to enter Canada by the ton, we are sowing seed destined to give us a teeming harvest of evil in a few years. These papers, from their oddness, vulgarity, but most of all from their suggestive illustrations, attract the weaklings and the youthful. Can this not be prevented? Let our Postmaster-General answer. We are told that our people demand these papers. Is that because we have taught them to read without educating their taste? We live in an age of unrest, of a discontent with our surroundings, a contempt for older forms and customs, a desire to obtain wealth and pleasure without regard to the means used. "The end," seems to, "justify the means." This state of affairs is producing an army of educated, unscrupulous men, disdaining honest work, growing rich by preying on society.

Whether it be an M.P., voting with a railroad pass in his pocket, a boy cheating at marbles, a boodler, or a common thief, the principle is the same. In the past we have had ignorance and illiteracy with a kind of rough honesty among our people. We seem in danger of an educated refinement, but an almost natural dishonesty in the future. I am not a pessimist, but I cannot shut my eyes to the prevailing creed of honesty held by the majority of our political and business men to-day.

These men are not foreigners; they are the results, in a great measure, of our educational system, public and private. Is the

former at fault? Are we sacrificing the heart and hands for the sake of the head?

If our youth were trained to work more with their hands, would they be less likely to enlist under the black flag of crime?

This, ladies and gentlemen, I leave for you and other thoughtful Canadians to decide.

The limit of my paper admits of no suggestions as to how we may check the march of the criminal. I have only tried, in a disconnected way, to call attention to the different routes by which he comes.

My object was to arouse thought on this subject, which, to be of any value, must be scientific, practical, and divested of all sentiment. In the words of Kipling we must

Go to our work, and be wise,  
Certain of deed and of pen,  
We are neither children nor gods,  
But men in a world of men.

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*THE ETHICS OF THE SCHOOL-ROOM.*

WM. J. MILL, B.A., NORTH BAY.

MY earnest purpose in this paper is to reach the ear and heart and judgment of my fellow teachers with a plea founded upon observation, the testimony of others, and my own personal experience, for a higher status of deportment among our Canadian boys and girls in the school-room.

I have a growing conviction that this matter does not receive the thought or sympathy it deserves from either teachers or parents. So engrossed do we become with caring for the mental needs of our youth that, in comparison, the moral nature is practically ignored. Character-building receives but a passing, incidental touch here and there, as though it were only a very secondary affair. The body and the mind are being urged forward to their highest development at an ever-increasing rate of speed, while the moral nature is left to shift pretty much for itself. What do our bodies and our minds amount to after all, if the soul be not properly ballasted? I fear that in our educational system, excellent as it is in many respects, there is a good deal of misplaced emphasis in working out our ideals. As character far transcends everything else in the human organism, it becomes our chief business as teachers and parents to look closely after its development. If there be a logical order of importance, as regards our field of operations, I believe it to be heart, mind, body; and I am not sure that we are not following an order directly the reverse of this. The public mind needs awakening and educating along this only rational line, and if teachers could only realize it for themselves, they would find that a great deal of the fret and chafe and worry of their work are due to the fact that this order is not observed.

No attempt is made here to disguise the fact that too generally our boys and girls move upon too low a moral plane. The testimony of our inspectors and of the most devoted and observant of our teachers will sadly substantiate this. Not that our youth of to-day are necessarily any more perverse than we boys and girls of an older growth were at their age. Nor is it assumed that Canadian boys and girls compare unfavorably with those of any other country. The question is not one of comparison, however, either at home or abroad,

it is a question of accepting or rejecting this conclusion. We accept it unhesitatingly.

Our discussion may now take the form, perhaps, of a series of propositions.

*1. Misconduct is due to inherited tendencies and to environment.* Misconduct is due to, at least, three causes, inherited tendencies, home environment and outside associations. Parents may themselves be slaves to inherited tendencies to evil, and because of such, some allowance must be made for transmitting vice. Human perfection, at its best, is but a very human affair. It falls far short of the demands made upon it by the plastic, receptive nature of the child. The absorptive powers of the child's nature are almost illimitable. At every pore of his nature influence is taken in and, to a great extent, assimilated. The most of parents, it is to be feared, in this and every other civilized country, have not yet begun to recognize this supreme fact.

What is to be thought of the excuse of lack of time which many parents plead for neglecting the training of their children? Some are, no doubt, so circumstanced as to render this plea justifiable, but others are not. Time is found, and taken, to do far less important and often very questionable things, such as to hoard money, to frequent ball-rooms, and bar-rooms, and billiard parlors and gambling dens, but no time is found to train the child.

It is bad enough, in all conscience, for parents to thus neglect the training of their children, and to relegate them to the teacher and minister, but how are we to sufficiently condemn those parents who are actually abettors of vice among their children? Not a few are to be found who use profane language in the hearing of their children, and even towards them. Others are mean and close in their natures and their children are consequently surrounded with an atmosphere of selfishness. In many homes there is no daily recognition of the Divine Father, or if so, it is the veriest perfunctory sham.

What are we to think of the parent who allows his children to be out on the streets at all hours, and that without any supervision whatever? Is it any wonder that when the tender soil of the child's mind and heart is subjected day by day to such baleful influences a crop of vile weeds will take permanent root there? His whole moral nature is more than likely to become saturated and vitiated by such environment.

To remedy these evils there must be just a complete reversal of these untoward conditions. In many cases the teacher is the main

rebutting influence against them, and he often finds himself unable to cope with forces so many and so adverse. Parents are often on the verge of distraction to know what to do for the best for wilful boys. The only cure, in the majority of cases, is to prevent wilfulness. The parent and the teacher must go heartily hand in hand in jealously guarding the child, and in carefully directing his training during his tender years. All clashing and antagonism between teacher and parents must be kept in the background. A certain amount of friction is unavoidable in every school, and parents can do much towards keeping this friction down to the minimum. Much of the usefulness and good influence of the teacher are due to the respect shown to his person and office in the homes of the children.

*2. Misconduct moves along certain well-defined lines.* Some of the most prevalent and malignant types of misconduct I meet with are, lying, idling, rudeness, selfishness, dishonesty in work, untrustworthiness, concealing wrong-doing, self-justification in wrong-doing, and filthy pencillings on walls and other surfaces. And, perhaps, the most regrettable thing about these evils is that they do not exhibit themselves incidentally as the outcome of unguardedness, but they present, in too many cases, all the signs of confirmed and cherished habits. They betoken design and deliberation. The naturalness, coolness and spontaneity which accompany their performance are very painful to behold.

Some discrimination must be made here in favor of the girls. I have never known a girl to be guilty of filthy pencillings : and rudeness, selfishness, and untrustworthiness are of comparatively rare occurrence. A girl will be found occasionally to lie, to be selfish and dishonest, and to seek to justify herself in wrong-doing, as well as to conceal it in herself and in others, but, on the whole, a higher moral tone and more self-respect seem to pervade girls than boys. A boy will be found here and there whose moral sensibilities are uniformly tender, and of a high and intelligent order, but in too many cases these qualities appear terribly blunted, if not entirely dead. Our concern is, therefore, primarily and almost entirely with the boys.

It will be impossible, within the short compass of this paper, to discuss, in detail, more than one of these offences which have been named. I choose one which teachers, no doubt, often meet with, that of the concealment of wrong-doing. As an example, a litter is made on some part of the school premises. The teacher has a suspicion of the offender and asks for an acknowledgment of the offence. The chances are that he will not only not get it, but that the party will

stoutly deny having done it. What course is the teacher to pursue ? To let the matter drop here would be to put a premium upon wrong-doing. The offence is not so much in making the litter, as in the concealment of the act. How to disarm a boy of such an unfortunate habit, and how to diagnose satisfactorily such a case and apply an adequate remedy are, to my mind, problems of vastly more importance to the teacher, and to the highest welfare of any community than the development of a boy's physical and mental powers.

But not only will a boy often be found to conceal an offence of his own, but he will also deliberately conceal wrong-doing in others. In so doing he becomes a party to such offence. He actually encourages the offender to lie, and to perpetrate every manner of wrong-doing. To me, this is a heinous offence, for, if a boy with a tendency in that direction finds that he can do wrong and be assured of being shielded by his companions, his whole moral nature will be imperilled. There is no telling when and where such a boy may break out, or to what excesses he may eventually go. It is very hard to keep an infection of this kind, once started, from spreading, and when it becomes the prevailing tone of a school there will exist a moral plague that will soon seriously cripple the work of any teacher.

A most mischievous notion prevails in some quarters, if, indeed, it is not general, that, when a teacher requires a pupil to tell him of any act of wrong-doing, it would be tattling for the pupil to do so. Some parents force their children to take this position, and, by so doing, are responsible for much of the evil arising out of the concealment of wrong-doing. Tattling is an offence that no teacher should tolerate, for it is the outward expression of an unkind, selfish, grumbling spirit within. The whole thing turns upon the motive. When any offence is committed the teacher is entitled to know of it, and if the offender will not confess the wrong, the other pupils are in duty bound to tell, if they know, and are required to do so by the teacher. This position is due to the teacher, to the offender himself and to the moral tone of the whole school. Of course, the motive of the one who discloses wrong-doing in another, when required to do so, should be to do good, not to vent spite, or to get another into trouble. Telling of this kind is in no sense tattling, it is simply maintaining the right because it is right, and frowning down the wrong because it is wrong, and no individual can claim to respect law, and justice, and order, or to be actuated by high moral purposes, who takes any other ground.

*3. Misconduct constantly tends to assume a set fixity of form.*  
Nothing is more to be dreaded by the anxious parent or teacher in

connection with misconduct than the power of habit. Let a child, having once entered upon a course of evil, be allowed to drift along in it unchecked, and the result is unmistakable. He will find himself the helpless victim, sooner or later, of a relentless tyranny.

The supreme business of the parent and of the teacher, at this critical juncture in a child's life, is to determine the bent and set it shall take; and the parent or teacher who lets this precious moment slip heedlessly through his hands is guilty of one of the most treasonable acts imaginable against the child, and against society at large. He is virtually responsible for the making or the marring of a human life, and not only of a life that is isolated and self-centered, but of one that will touch with health or blight every other life around it. What our teachers in all grades of our schools, from the Kindergarten to the University, need to-day, and what the parents of Canada need to-day, is a loftier and more adequate conception of the supremacy of childhood as an essential factor in national growth and national happiness.

We have physical and mental laboratories and gymnasiums in abundance, well-manned and well-equipped, but the trouble is we pay too much homage to these. If we, as a people, desire effectively to neutralize the inevitable trend of wrong-doing and to attain to a higher, all-round development, it must be by insisting upon a more natural and a more healthy equilibrium amongst our powers, and this is in a large measure the work of the school-room. The brutal exhibition the other week in Carson, Nevada, tolerated and applauded so universally over this continent, is a mighty and deplorable evidence of the trend of human nature; and, while our school system should not be charged with such an excrescence as this, it is a plain index to the parent, the educator and the philanthropist, where they should direct their energies and sympathies.

Moral training, with all our churches, Sabbath schools, Christian colleges, and Christian homes seems yet in its infancy. The hope of our country is bound up in the embryo of childhood, and to us teachers is committed very largely the solemn charge of nurturing it and of determining the issue.

Good conduct depends very largely upon habit. Get the child naturally, repeatedly, and unconsciously into the habit of speaking accurately, of acting considerately and justly, and he will find it hard and unnatural to do otherwise. This is emphatically and especially the work of the primary teacher. When the child reaches the higher grades of a school, his character is very largely made for

good or for bad. The teacher of advanced classes has to hold the good that has been gained, but he can do comparatively little, and that little at a tremendous expenditure of nervous energy and anxiety, to accomplish what is a comparatively easy task for the primary teacher. I have often been pained at the blindness and apathy of some of the teachers of the junior classes in regard to this important truth. Any teacher of infant and junior classes who has not a particularly sensitive conscience respecting this matter should feel herself a positive infliction upon any community.

*4. A child's conduct should be expected to correspond with the prevailing tone of a respectable, well-regulated community.* It is, perhaps, difficult, except in a general way, to lay down a standard of conduct that would be acceptable to everybody in every community. And yet, if the consensus of opinion in any given community were taken, there might be found a very slight variation from a perfect agreement, after all. There is, of course, a divergence between the assent given to views and the practice of them in every locality. All will admit that swearing, drinking, gambling, lying, dishonesty, unreliability, uncleanness, cowardliness, gossiping, idleness, etc., are wrong in the abstract, but all will not refrain from practising them. All will admit that kindness, unselfishness, sobriety, sympathy, courtesy, respect for elders and superiors, and reverence for sacred things are commendable virtues, but all will not practise them all nor teach their children to do so.

As it is very desirable to arrive at something definite as to what should reasonably be expected and required as good conduct from a child, perhaps the following outline will be generally acceptable. No matter what a child's previous training or environment may have been, the teacher, as a moral force in a community, should in time expect of him that he be neat and cleanly in his person, punctual and regular in his attendance, careful and pains-taking in his work, accurate in his speech, diligent at his tasks, truthful, eager to admit wrong-doing, clean in thought and tongue, respectful, frank and open in manner, unselfish, considerate and helpful in his intercourse with others, obedient, moderately ambitious, orderly and order-loving, trustworthy, open to conviction, and ever anxious to become better and more useful. He should develop a growing hatred for all that is mean and indecent, and unbecoming in his own conduct, and in that of others. He should be prepared to take a stand upon what he believes is right, regardless of consequences. I believe that it will

only be when a boy or a girl is led gradually, but surely, up to this position that there will evolve true nobleness of character.

I am persuaded, also, that such a development of character is quite possible, if teachers and parents will only go resolutely hand in hand to this end. Of course, both of them will have to have faith in its possibility, and they will have to realize more clearly than many of them do its desirability. Parents will have to see that their children, and humanity at large, claim a constant, a respectable and a definite portion of their time and attention. They will have to see that their chief business is not to add to their bank account or to their ease and indulgence, to the neglect of their children.

*5. The conduct of the child in the school-room has many important bearings upon the future of his life.* The present boy and girl are to become the future responsible citizens of the state. The boy upon quitting school leaves behind him a record. As a passport to employment testimonials of character and ability will be demanded, and if his record be shady he will not be sought. It is wonderful, too, how early and how thoroughly a boy's record becomes public property.

Again, should he pass muster at the threshold of life, his work and character will be closely scrutinized ever after, and the boy will find that he cannot, at a moment's notice, don the livery of moral worth and doff it again at pleasure.

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*PUBLIC SCHOOL LEAVING EXAMINATION.*

WM. SCOTT, GUELPH.

An educational system like ours, which is based largely on past experience, must, in order to keep pace with the progress of the age, be continually undergoing changes, changes which we believe will better meet the requirements of the times. No one will pretend to say that our educational system is a perfect one, and of late the attacks upon it have been many and bitter.

I believe the main charges are, that the High Schools are being fostered at the expense of the Public Schools; that some scheme should be devised by which the sphere of the Public Schools could be widened and enlarged so as to afford the children of the rural population further and increased facilities for obtaining a higher education in the Public Schools. As it is, the farmer is compelled to send his children away from home, from under the parental eye, at a tender age, and pay the cost of their maintenance—which he can ill afford—for an education which should be provided in the Public School. Furthermore, this association of town life, together with the training they receive in the High School, gives them a distaste for farm life and manual labor.

It is not my intention in this paper to enter upon a discussion of all these points, but, merely, to touch upon such as may legitimately come up in dealing with fifth form work in our Public Schools.

When we are told that ninety-five per cent. of our population never go beyond the Public School, is it not perfectly right to assume that the highest possible development of the great mass should be the aim of our educational system? And since only five per cent. of the pupils in the Public Schools ever enter a High School, should the curriculum of the Public Schools be constructed so largely as it at present is, with a view to the preparation of candidates for entrance to the High Schools? The answer to this question must manifestly depend on whether that curriculum is the best and most useful for the average pupil who does not intend to enter a High School. However well adapted the entrance standard may have been for the educational conditions of twenty years ago, the time has come when our Public Schools require a broader and more extensive curriculum to meet the present educational conditions.

For, at least, the past fifteen years the Public Schools have been too much regarded as feeders of the High Schools. The Minister of Education has so often pointed out to us that the Public Schools led up to High Schools, the High School to the University: the whole educational structure was a unit, that there was no overlapping. Consequently, pupils who did not enter the High School after passing the entrance examination might be regarded as having completed their education.

I have no hesitation in saying that the entrance examination has exerted, and still exerts, a most pernicious influence on our Public Schools. Has it not driven from the rural schools our large girls and boys? Has it not led pupils to believe that when they succeeded in securing an entrance certificate they had obtained a thorough education, whereas they had obtained only a smattering of the subjects on the entrance curriculum? Not only has it driven out of our schools the fifth class—the class that gave emulation and stimulus to both teacher and pupils—but it has reduced the schools to such a low status, that trustees came to the conclusion that as there were no advanced pupils, no large boys and girls, they could easily be taught by any teachers holding third-class certificates. Our rural schools, therefore, readily fell a prey to untried beginners, and many of our experienced and efficient teachers have been underbidden and jostled out of the profession. I claim that the entrance was one of the gateways through which inexperience, inefficiency and instability entered the teaching profession.

Sufficient pressure, however, was brought to bear upon the Education Department, pressure somewhat akin to that brought to bear upon a certain unjust judge by a widow. By our importunity we were granted the Public School Leaving Examination.

More recently another concession, still farther in advance, has been granted to towns and villages in what is termed "Continuation Classes." Last year, a still more forward step was taken when it was decided to combine the Public School Leaving Examination with the First Form in the High School. For these, and all other mercies, we are devoutly thankful.

Since the institution of the Public School Leaving Course, there certainly has been some betterment of the condition of affairs. Year by year we note with pleasure an increase in the number of schools in which fifth-form work is done, but the school in which a fifth-class is taught is yet the exception and not the rule. As long as the Entrance Examination is placed at the middle of the Public School course, it

must greatly retard the extension of fifth-form work. Could pupils be induced to take a two-years' longer course in the Public Schools, not only would it be better for themselves, but better for the High Schools, should they afterwards attend a High School. I contend that a Public School education can be obtained only in a Public School. Efficient though the High Schools may be, their course is such, that, if the foundation has not been "well and truly laid" before entering the High School, it never will.

Hence the remedy. Abolish the entrance examination and substitute the Public School Leaving in its place. This change has long been foreshadowed, then why delayeth its coming? Is it because the High Schools cannot exist without it? I verily believe that many of them are so disgusted with the crude material they have harvested in past years, they would gladly welcome the proposed change. Possibly it might mean death to some, for whose existence no man seems to be able to render a satisfactory reason.

It may be urged that, with the multiplicity of studies on our curriculum, the teacher in the rural school is not capable of overtaking the work in the Fifth Form satisfactorily. I readily admit it involves an immense amount of arduous and pains-taking labor on the part of the teacher, but it has been done, and so efficiently, that pupils were enabled not only to pass the Public School Leaving, but also the Primary as well in not a few cases.

Although I have advanced these proofs as to the ability of the teachers in our rural schools to do this work efficiently, at the same time I am of the opinion that by some slight alterations in our curriculum, the work could be arranged in such a manner as not to fall so heavily on the teacher and yet be performed more thoroughly and efficiently. I would recommend that for the Public School Leaving examination, the subjects be divided into two groups. That a candidate at this examination may take Group I the first year, and Group II the following, or any succeeding year. Or, if desired, both Groups may be taken the same year. By the adoption of such a system, the teacher would not require to take up so many subjects during a session, and as a natural consequence, they would be better taught.

Before suggesting a grouping scheme I would like to refer, very briefly, to the Public School Leaving Curriculum. Last year an able, an exhaustive paper was read before this section of the Association, by Mr. Grant, of Guelph, dealing with a revision of the Public School Curriculum, and presenting a scheme for its remodelling. A resolu-

tion was afterwards unanimously adopted, endorsing a revision on the lines proposed by Mr. Grant. In that paper the introduction of Elementary Science into our Public Schools was strongly advocated, and that in rural schools, at least, the teaching of Agriculture be compulsory. It is not my intention to do more than merely emphasize these views. Apart from the excellent training it gives to the perceptive faculties, does it not seem strange that Agriculture, which is the foundation of all our industry, and the mainstay of our material well-being, is wholly neglected in our rural schools?

Scarcely less strange is it that in this age of science, the age of steam engines, the electric motor and photography, a pupil may leave school totally ignorant of the principles of heat, light and electricity. I am convinced the day is not far distant when both Agriculture and Elementary Physics shall be experimentally taught in our Public Schools.

But as Botany has been placed on the curriculum for 1898, I see no reason why we should not have a "wider botany," embracing the principles of Agriculture, and leaving out many of the technicalities of Botany.

In preparing this scheme, which I present merely for discussion, I have anticipated these changes:—

*Group I.*—Reading, Spelling, Drawing, Geography, Botany and Agriculture, Composition, Book-Keeping and Commercial Transactions.

*Group II.*—English Literature, History, Grammar and Rhetoric, Euclid, Algebra, Arithmetic, Elementary Physics.

If the subjects on the curriculum which I have outlined were taught in our Public Schools, surely there could be little cause for complaint that our Public School Course was not sufficiently extensive to meet the wants of our rural population. The introduction of Elementary Science into our rural schools, taught in a rational manner, might materially assist in solving the problem, "How to keep the boys on the farm."

Our course of study should not only be extensive, but it should possess sufficient elasticity to adapt itself to the conditions of the urban as well as the rural population. I think, therefore, that in towns and villages an option should be allowed between Agriculture and Stenography and Type-Writing, for the benefit of those who purpose engaging in commercial pursuits. Hitherto, town pupils have had to seek in a business college that education which should be supplied by the Public School.

But no matter how ideal our curriculum may be, it will utterly fail

unless we can retain the services of well-trained, experienced and efficient teachers.

The crying need of to-day is for cultured men and women fully consecrated to their work, who are capable of developing and directing into proper channels those powers of the mind which will eminently qualify the youth of our fair province to rightly fulfil the duties of Canadian citizenship.

It should be the aim of the Education Department to safeguard the interests of the pupils in our Public Schools, by providing them with competent teachers. It should also safeguard the interests of the teacher against those who intend to make use of the teaching profession as a stepping-stone to some more lucrative occupation.

Surely the system is radically wrong that commits the task of educating the great mass of the children in our rural schools to inexperienced boys and girls. Unless some prompt and effective means can be found to check the "under-bidding system," practiced by these untried beginners, speedy deterioration must inevitably follow.

Instead of these novices being a source of weakness to our Public School system, why not compel them to minister to its efficiency?

At the end of the Model School term the Public School Inspector should be empowered to appoint the graduates to the various schools in his inspectorate, which are under the charge of efficient teachers, and where Fifth Form work is taught. An apprenticeship of, at least, one year should follow. At the end of that time a certificate should be granted, if he has demonstrated to the satisfaction of the Inspector and teacher that he possesses the qualifications that characterize the true teacher.

The benefits derived from the adoption of such a system as I have outlined would be three-fold.

It would allow the teacher in charge of the school more time to devote to Fifth Form work, it would give to the beginner true practical training in methods, and in the management of an ungraded school under the supervision of a competent teacher, and last, but not least, it would prove a strong deterrent factor to those who intended to make teaching a stepping-stone to some other profession.

I would also advocate a change in the mode of the apportionment of the legislative grants. The grants should not only be increased, but apportioned on such a basis as to encourage efficiency in teaching, to encourage trustee boards to provide suitable buildings and equipment, and to pay larger salaries.

I would advocate the following as a basis :—

(1) A grant in respect to the efficiency of the schools as certified by the Inspector.

(2) A grant in regard to buildings and equipment.

(3) A grant dependent on the amount of salary paid to teacher.

(4) A grant on the basis of average attendance.

Such a basis would be an incentive to the teacher to do his utmost to raise the standard of his school, and an extension of Fifth Form work would be the result. It would be an inducement to trustees to engage competent teachers to increase the efficiency of their schools. It would also be an inducement to trustees to take an interest in their school-houses and their equipment.

Arguments of this kind, which appeal directly to the pockets, often prove effective, when others utterly fail.

I have now occupied much more than my allotted time in bringing before you this important subject. In a ten-minute paper, which I was asked to prepare, it is impossible to do more than present a bare outline, then leave the matter for discussion, hoping it will receive that consideration which its merit demands.

Before concluding let me briefly summarize the points I have raised :—

(a) Abolition of Entrance Examination, and substitution of Public School Leaving.

(b) The subjects of the Public School Leaving Examination should be divided into two groups :—

(c) Modellites should serve an apprenticeship of, at least, one year in an ungraded school where Fifth Form work is done.

(d) A basis of apportionment of legislative grants should be adopted to encourage efficiency in our schools.

These changes that I have proposed may be somewhat radical, but they are not altogether new. Some of them, at least, have been previously advocated in this, and in the Inspectors' section of the Association but we know it is only by persistent reiteration that any great reform has been brought about. Therefore, "Let us not weary in well-doing, for in due season we shall reap if we faint not."

*THE PUBLIC SCHOOL LEAVING.*

A. H. MUSGROVE, WINGHAM.

It is now five years since the Public School Leaving Examination was instituted, and, in view of the recent changes made in the curriculum, it may not be unprofitable to review briefly the results already attained under this examination, and to notice what the probable effect of the recent changes may be.

There were two reasons advanced for the establishment of the Public School Leaving Examination.

1st. For some years there was a strong feeling manifested by both parents and teachers that there should be some examination or test between the Entrance and the Primary—in centres where there was no High School, this feeling was very general. It was found that many pupils, after having passed the Entrance, returned to school to continue their studies for a further period—many of these, however, having no intention of proceeding to the primary, and having no examination or test in view, became careless and indifferent, and in many cases proved a source of annoyance to the school. For, notwithstanding, what may be urged against examinations, yet they are sometimes the only weapon a teacher has at his command, to spur on indolent and indifferent pupils. So much was the necessity for some such examination felt in our county, that, at a joint meeting of the Executive of our Teachers' Associations a programme of studies was prepared for fifth class pupils and an examination held annually.

A second reason was the great demand for an increased grant to these Public Schools doing High School work—a grant somewhat proportionate to that paid to High Schools on the basis of the average attendance. This demand was met by granting five dollars for each pupil who passed the Leaving; but whilst five dollars was granted for each pupil passing the Leaving, nothing was paid for pupils passing the Primary—a more difficult examination. This, however, is to be remedied by the establishment of Continuation classes. The first regulations issued contained certain restrictions which tended to render the Leaving unpopular.

These were as follows:—There must be at least two teachers in a school—the Principal must have, at least, a Second Class Certificate—Public Schools in High School centres were debarred from receiving any grant.

In due time these limitations were removed, and many other important changes made, all tending to increase the efficiency of this examination.

These changes were:—Entrance standing was allowed to pupils making twenty-five per cent. on Leaving subjects, the Book-keeping was limited to Single Entry, the course in drawing was simplified, Algebra, Euclid, Physiology and Temperance were added to the programme of studies, pupils passing the Leaving were allowed second form standing in High Schools.

At the same time, it was so arranged that (with the exception of the Reader) the Public School text books would be sufficient for the Leaving examination. Added to this, the examination questions were more reasonable and fair—set more to test the pupil's knowledge of the prescribed course than to exhibit the examiner's skill.

That the examination became more popular may be learned from the numbers passing in the several years. The numbers are as follows:—1892, 195; 1893, 268; 1894, 690; 1895, 1395; 1896, 1836. Total in the five years, 4384. Average per year, 877.

Many parents had now come to look upon the Leaving as the end of the Public School course, and, in many cases, better teachers were employed, and higher salaries paid in consequence.

The fee was but one dollar, the examination was conducted simultaneously with the Entrance, the answers were read and valued by the County Board and our Public Schools had received a decided impetus.

Having thus briefly sketched the rise and progress of this examination, I should like to stop here; but the recent regulations which come into effect at the midsummer vacation of the present year, require more than a passing notice.

From the first there was a general impression throughout the Province that the High School teachers were unfriendly to the Public School Leaving. From communications in the public papers, it appears that the following were the principal objections:—

1. That there was an overlapping of subjects:—that Public Schools and High Schools were doing the same work.

2. That when pupils, after passing the Entrance, remained in the Public School until they had passed the Leaving, their entrance to a High School at this stage disturbed the organization and classification of the High School. Especially was this the case when the pupil desired to study the languages.

3. One writer stated that the methods of instruction prevailing in the Public Schools were inferior, and that it would be a distinct gain to any pupil who had passed the Entrance, to enter a High School at once. We suppose such gain would be derived from the more modern and scientific methods pursued in our High Schools. As the majority of our Public School teachers were trained in our High Schools these teachers must have sadly degenerated.

4. Moreover, the unreasonable and unwarranted agitation for fewer Departmental examinations was raised, more, doubtless, for party than any educational benefit.

We know what the result has been. The Public School Leaving and Form I. of the High Schools have been amalgamated, the Leaving will, in future, be a High School examination, and its usefulness and popularity as a Public School examination have been seriously impaired, if not destroyed.

We shall now proceed to examine in detail the changes made in this examination under the recent regulations.

1. The examination fee has been doubled; formerly it was one dollar, now it is two dollars. As one dollar was sufficient in the past, we see no reason why the amount should have increased, but possibly when examiners work in the city they require a greater remuneration.

2. It will be necessary for a pupil who wishes to take up Fifth class work, to purchase a full set of High School text books. This in itself, is no small item—to a laboring man it means much, therefore, on the ground of increased cost, the recent changes injuriously affect our Public Schools.

Regarding the course of study many changes have been made.

In English Literature, Euclid, History and English Composition the limit remains unchanged.

The limit prescribed in history was already too extensive, and it is impossible to do justice to this subject in the short time at the teacher's disposal.

The course in Arithmetic has been extended. It now includes the whole of Commercial Arithmetic, the theory and proofs of Fractions, Mensuration of rectilineal figures—a very wide and difficult course.

In Drawing the High School Drawing Course, Books one and two have been substituted for Drawing Book number 6 of the Public School Course.

In Book-keeping the limit is,—Book-keeping by Single and Double entry, drafts, bills, notes and commercial transactions. The addition

of Double entry is a decided advantage, as it is much easier to commence with Double entry than with Single entry.

The course in Algebra is :—Elementary rules, Measures, Multiples and Fractions begun. This is less than in previous regulations, but why strike out Factoring and Equations? Without a knowledge of factoring very unsatisfactory results can be obtained in measures, multiples and fractions; whilst the solution of problems by means of algebraic symbols adds interest to the study of this subject. When a practical value of a subject of school study is readily made apparent, the interest is more easily aroused and maintained.

The course in Geography has been greatly enlarged. It now includes the subject as treated of in the whole of the present High School Geography. It includes Geology, Mathematical, Political, Physical and Commercial Geography. When a pupil has passed the Leaving he will have completed his school course in Geography—at an age when many are too young to understand fully and to grasp clearly all the various facts presented.

Botany is added to the Leaving. The course is the same as that previously prescribed for the Primary. It includes the practical study of representatives of fifteen orders of flowering plants, morphology of the root, stem and leaves, germination, pollination, fertilization and the nature of fruits, flowers and seeds. The Compositæ, an order much too difficult for junior pupils, might well have been omitted. The only compensation made is, that Physiology and Temperance have been left off.

Having thus briefly enumerated the several changes and additions made it remains to be considered what the effect of these changes upon the Public School will be.

Heretofore a fairly intelligent and industrious pupil could, within one year after passing the Entrance, pass the Public School Leaving. It was a good year's work, and there was always a reasonable chance of an industrious pupil being successful. The more extended course now prescribed will render it almost impossible for a pupil to prepare for the Leaving in one year, whilst the course is too limited for a two-year course. In High Schools, when two or three languages are taken, it will be a suitable two-year course. Many pupils, after passing the Entrance, return to school for another year, knowing that in that time they could pass the Public School Leaving; but now when there is not much hope of doing this they will not return at all. Moreover, as it will be really a two-year course, there will be two divisions

in the junior fifth, additional labor and less of teaching power to the school.

In future Primary candidates must, in addition to Form I, take the Public School Leaving, and were the curriculum for the Leaving as it has been heretofore, no additional difficulty would arise. In many of our larger Public Schools the usual course was, The Entrance; the next year The Leaving, and in the following year The Primary. This was a very satisfactory arrangement. Under the present regulations one difficulty will be, that, on account of the more extended course prescribed for the Leaving, it will be almost impossible for a pupil to pass the Leaving in one year, and he will, therefore, be compelled—if he wishes to pass the Primary in two years—to take both examinations the same year, a great disadvantage to both teacher and pupil. This will not affect our High Schools, as the additional time is generally occupied in the study of the languages.

The handing over of the examination of candidates' answers to the Department was a great mistake. The teachers of this Province have not any too much confidence in the methods there pursued. In many cases injustice has been done to deserving candidates. This examination should have remained where it was—in the hands of our County Board of Examiners, and under the direct control and supervision of our County Inspectors, than whom there are none better qualified, and in a more suitable position to deal justly and fairly with all parties. From the very nature of their positions, our Public School Inspectors are in a position to deal more fairly than any other examiners could possibly do. They are acquainted with all the pupils in the senior classes of our Public Schools, take an interest in their welfare and progress; fully understand their opportunities and capabilities, so that it is hardly possible for any other examiner on the County Board to make a mistake in valuing a pupil's paper without it being detected by the Inspector. Many mistakes, both at the Entrance and Leaving, have been rectified by an Inspector, who previously knew the general standing of the pupil.

Besides, an Inspector is given an additional opportunity to judge of the work done in the school-room, as exhibited by the answers of the pupils. By means of information thus obtained many valuable suggestions have been made, and teachers and schools have, therefore, benefited.

The Public School Leaving was established for the purpose of benefiting and assisting the Public Schools, and during the five years it has been in operation it has fulfilled the expectations of its most

sanguine supporters. By the unerring test of experience it has demonstrated its usefulness and established its claim to public support and confidence. Our schools have been benefited, strengthened and improved by the introduction of a fifth class course of study, and any change that would in any way impair their usefulness should not have been made. No influence, however powerful, no exigency, however great, should have had any weight in making changes that would in the least, destroy its efficiency. Being unable to destroy the child, its critics have persuaded the authorities to permit them to adopt it, in the hope, that, under their fostering care it may grow up a more vigorous and useful youth, but, we fear, that, being deprived of the care and attention of its lawful parents it will languish and die.

In conclusion, we are of the opinion that the following changes should be made :—

1. The examination of the answer papers should be restored to the County Boards.
2. The examination fee be reduced to one dollar.
3. The curriculum be so arranged that for the subjects of the Public School course, the Public School text-books be sufficient.
4. That the course in Geography be reduced, leaving that subject to be continued in Form II of High School course.
5. That the course in Botany be reduced, and that the limit in Arithmetic be more clearly defined.
6. The filling of Drawing Books be discontinued.
7. That the course in History be limited to fixed periods of history.

With these changes we are quite sure that the fifth class course will be very acceptable, and well suited to the wants of our Public Schools, which are attended by ninety-five per cent. of our school population, and whose efficiency should be the first consideration in any educational policy, or in any curriculum of studies drafted under that policy.

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## THE VOCALIZING AND VISIBILIZING OF THE PHONIC SYSTEM.

L. T. LOCHHEED, M.A., CALEDONIA.

Your earnest attention is respectfully requested for the investigation of the greatest authorized evil to true educational development; also of the proposed means for its removal. This evil is alphabetical oral spelling and method of writing.

A new primer is greatly needed, not only to fill up the great gap between the present one and part II., but more especially to get at the root of the evil of alphabetic spelling, hence it should be authorized, if published entirely in phonetic vertical script.

By this every vowel sound can be illustrated by but one and the same distinct character of its own, likewise each single and double consonant function by but *one* consistent representation of that function, each being vocalized by sounds of *a*, *e* or *i*, instead of arbitrary names such as aitch, double-you, wi, tea-itch, see-itch, double-you-itch, etc.

These names do not involve the functions of the letters at all, therefore inconsistent, and worse than useless for oral spelling, or analysis of words which should succeed and harmonize, instead of conflicting, as the alphabetic spelling now, so seriously does, with the teaching of Phonics.

The great majority of our words on account of consisting of arbitrary combinations of letters, must now be taught by the look and say, or old alphabetic method; but phonics can be applied with perfect consistency to every word, if written in phonetic script, a complete alphabet of which will, in conclusion, be submitted for your approval or improvement.

A few examples now will somewhat illustrate this. [NOTE.—Owing to our not having Mr. Lochheed's modifications of type we cannot print his illustrations.—ED.]

Not only will a phonetic script primer be of the greatest assistance in teaching, popularizing and perpetuating phonics, by thus visibilizing all the vowel sounds and consonant functions, but also in showing the accents by shading, and the syllables and pauses by spacing. It will, moreover, be prefaced by copies and suggestions on the teaching of the elements of writing, and progressive steps in the formation of

each letter and word, thus making it of the greatest possible assistance to both teacher and pupil.

The authorization of a such primer will not render any change in the printed forms of our words at all necessary, but will enable the pupil to interpret *these* in a logical manner, utilizing and cultivating the important powers of *observation, reason, and association* of ideas.

There is a vast difference, which seems to have been lost sight of, between the synthetic process of learning to read, and the analytic process indispensable in spelling and writing.

The former teaches the instantaneous recognition of words by the picture of the combination of its letters, the latter requires not a mere memorizing of that picture, as some seem to suppose, but a definite knowledge of the parts of each word, and the functions of these parts, so as to fully (if possible) reproduce or name each part, and construct the whole word.

Hence it has been a tremendous mistake, from Samuel Johnston's time to the present, to suppose we must write words with all the letters by which they are printed.

Our script is very different in appearance now from the print, and making it purely phonetic, so far from rendering the print more difficult to read, makes it far easier, as will be shown, by teaching what is the true sound of each vowel, and the silent letters in printed words.

How many persons there are who can read to themselves, but cannot spell so as to write intelligibly, or read orally intelligently!

Again, the phonic system does not go far enough to supplant alphabetic spelling. Thus, sooner or later, and in many schools, especially in the country, very much sooner than later, it is discarded for the look and say method of teaching reading, and for the old absurd *naming* of letters, since that is the only authorized method of analyzing words either mentally in dictation, or orally in spelling.

Expert phonic teachers, therefore, admit these difficulties, and that there is a great deficiency somewhere, all of which makes this reasonable, natural method of teaching synthetic reading very difficult and discouraging. This is especially the case with young teachers in ungraded schools where the cry of lack of time is raised as an excuse for slighting phonics, thus neglecting the cultivation of the child's observing, reasoning, common-sense faculties, particularly in training the eye and ear to work harmoniously in learning the uses of vowels, consonants and accents in both written and printed words.

It is very possible, yes, probable, that if something be not done, and

that very promptly, the phonic system will be crushed out in this swift age of (*so-called*) educational rush.

All these obstacles to phonics can be easily and completely removed by substituting for the old, nonsensical, alphabetic spelling, *true phonetic oral spelling*, and by supplanting the false, inconsistent, absurd printed forms of many words by logical phonetic script in which *every* word can be taught phonically and consistently. Phonics and alphabetic spelling are so seriously conflicting for supremacy that many claim our so-called spelling is becoming worse and worse, so that a re-action is setting in among parents and teachers against phonics, and in favor of going back to our old parrot jabbering of alphabetic spelling.

It is a most lamentable fact that the pernicious habit of perpetual telling, telling and cramming, cramming is the greatest weakness of our present educational system, and has originated from the apparent impossibility of teaching the interpretation and reproduction of the visible forms of our language, without telling the child the *names* of many letters and words which could never be drawn from him, because they are so arbitrarily named or spelled. This excuse for and habit of *telling* so much in *one* subject naturally leads the pupil to expect the same stuffing treatment in others (such as Arithmetic, Geography, Grammar, etc.,) sitting with open mouths, eyes and ears it may be, but closed reasoning powers, idly awaiting the dose to be injected into their memories by teachers, only too many of whom have thus, by force of habit, become victims of the vice of telling and cramming as the supposed easiest and quickest way over many difficulties.

What an awful curse to true educational development such a training is! Who can conceive the vast extent of its evil influence?

Thus children, instead of being educated to be self-reliant, thinking, reasoning, responsible grafts of the infinite, omnipotent mind, are trained to be weak, thoughtless, dependent, mimicking, memorizing machines.

Behold the forging of Darwin's missing link for making mortals monkeys!

Are we not all frequently so discouraged in trying to teach originality of thought, intelligent expression, distinct articulation, accurate pronunciation and spelling (if it may be called such); for, in spite of our best efforts, we see such disappointing results and comparative failures staring us in the face.

After twelve years' experience (five in Public and seven in High School work) in teaching reading, writing and spelling, in struggling

to overcome these difficulties and absurdities, and striving to get at the root of the evil, we are convinced that the solution to this perplexing problem is the teaching of phonetic script, instead of the alphabetic. Thus phonetic oral spelling can be supplementary to phonics, as the audible analysis of words, instead of the mere naming of the letters which is so injurious to the reasoning faculties and originality of thought.

To sum up then: The great and practical advantages of the adoption of phonetic script are far too numerous to mention, but a very brief synopsis of a few of them should convince all of its almost incredible educational value.

1. Phonetic script and spelling are perfectly logical and harmonize with common-sense and reason. Alphabetic script and spelling are just the reverse.

2. They cultivate great independence and originality of thought, strength and accuracy in reasoning, and also harmonize the keen observing powers of the child's eye and ear. Our present system tends to greatly retard all these.

3. The teaching and mastering of mathematical subjects, in both High and Public Schools, (wherein there are now so many failures, especially in Arithmetic) will be very much easier and far more successful.

The old alphabetic training greatly conflicts with the mathematical.

4. This script fully visibilizes our language by showing with but one and the same symbol for each: First, all the vowel sounds; second, each single and double consonant function, and third, the syllables and accents. Alphabetic script shows not even *one* of these great essentials.

5. Uniformity and stability of pronunciation and spelling will result, instead of from one to forty pronunciations for the same word in the world to-day, and many words changing in pronunciation and spelling from year to year as is now the case.

6. Distinct articulation, accurate pronunciation and accentuation are cultivated by phonetics, but sadly retarded and neglected by the present method.

7. No dictation or oral work will be required at all for spelling, and only as practice in writing and articulation in junior classes. Now, there is no end to dictation and spelling, and yet very many blunders are made.

8. The vast amount of time, labor and patience of both teacher and pupil, saved in learning to read and write well by phonetics, affords

an opportunity for teaching, first, natural variety of expression in reading; second, to obey the pauses as indicated by spacing and not with marks of any kind, or changing the punctuation; third, the cultivation of the powers of the voice, such as inflection, force, pitch, articulation exercises, modulation, melody, harmony, etc.; fourth, the varieties of rate of utterance, gestures and energy, according as the thought of what is being read demands; fifth, music (especially singing) so closely allied to good reading, and made so much more attractive and easy by the cultivation the ear has had in the fine discriminations of vowel sounds as taught by phonetics. How many alphabetic teachers now get time to even learn about these attributes of good reading, to say nothing of trying to teach them?

9. Not only can all the time now so wearily wasted in so-called dictation, spelling and reading, or rather mere pronunciation, be utilized for teaching reading as it should be taught; but also many other equally practical subjects of very great importance can also be taught well, whereas, now they are either crowded out entirely from lack of time, or skimmed over hastily in a very unsatisfactory manner, for both teacher and pupil. This great saving of time and energy will enable many to obtain a good practical education who now have but little. Thus, ignorance, poverty and crime will be very materially diminished.

10. Time will also be available for explaining the use of silent vowels and consonants in our printed words, the etymology and history of our language, to which the contrast between phonetic script and present print will call the attention of both teacher and pupil, so that many very interesting facts in the growth of the English language will be brought to light, whereas they now lie neglected or hidden by the present alphabetic methods.

11. Phonetic script can be written very much faster than the alphabetic on account of, first, discarding all silent, doubled, useless letters and the simplicity of the modifications as you will see. Second, the unhesitating certainty with which it can be written. Third, its reasonableness, thus being no great strain on the memory. Here, again, is an inestimable amount of time saved both in and out of school.

12. Shorthand can be learned with one-half the time and labor now required since both systems of spelling are purely phonetic and identical, hence no disastrous clash as at present exists, which has discouraged thousands in studying stenography to such a serious extent that they gave up in despair. Some of these, perhaps, are present. If all could write even one hundred and twenty words a

minute none would object to phonetic script. The rapidly increasing demand for speed in writing has led to the introduction of the study of Shorthand, even in our Public Schools, and it is taught in all those of the city of New York. With phonetic script both long and shorthand can be easily taught together, as a mere substitution of symbols and contractions is all that is required for the latter.

13. Again, phonetic typewriting will ensure sufficient speed to write accurately on such a machine fast enough for direct dictation or reporting, since no clash with shorthand spelling will occur to cause so many blunders as at present, and phonetic words are so much shorter and easier spelled.

What a boon phonetic script will be to the commercial and legal world!

14. In teaching any foreign language the accurate, unmistakable pronunciation of every word can be illustrated by phonetics, and save all the time and patience now spent in *telling* and learning how to pronounce these foreign words.

15. Not only can our pupils learn to read, write and spell English almost entirely by their own unaided efforts, and in far less time than at present, but foreigners will also learn our language by phonetic script with the same accuracy, ease and economy of time, for they can thus secure the pronunciation of our words by themselves, making the English language far more simple and popular in foreign countries, so that it will become not only the commercial and diplomatic, but soon the *universal* language of the world. Surely all these are consummations most devoutly to be wished.

In conclusion, to refute objections raised to phonetic script may be necessary.

Some very conservative persons, before giving sufficient thought to the subject, condemn it as revolutionary and too radical. Let those who object to any departure from the old alphabetic spelling, be consistent, and object to all the changes that have crept into our language, and go back to the method of spelling of those ancestors of whom we are so proud, viz., the Anglo Saxon race. Their spelling was purely phonetic, as Sweet, one of the greatest authorities on our language, states in his Saxon Reader. He says "Spelling in old English was purely phonetic, that is to say, each letter had a more or less definite pronunciation associated with it, and the words of the spoken language were written down by ear, not according to *orthographical tradition*, as is the case now. Hence, as a general rule, every change in spelling indicates a change in pronunciation." Now, I ask, is spelling to give accurate pronunciation, or to remain a *traditional relic* only?

*THE IDEAL TEACHER.*

R. W. MURRAY, TORONTO.

The subject assigned for discussion at this time is one of peculiar difficulty. In the first place, it is probably easier to dwell upon objectionable qualities of the teacher, because, in all of us, they are so prominently exhibited and easily assailed. It is more difficult for a critic to be wise and accurate in his observation of good qualities, and just in his comment upon them. In the second place, it is often found to be very hard indeed, to say definitely, what it is that contributes most to the successful work of one teacher, or to the failure of another.

It would be a great service rendered, if one were able, with any degree of certainty, to make out the characteristics of the ideal teacher. They are many in number, and very varied in character; and all that can be attempted is to draw the attention, in a very general way, to some of the most important features. In doing so there shall be no effort made to develop any one subject at length, but there may possibly be something said that will ask for thought and provoke discussion.

It is well to have our attention turned, and frequently turned, to the meritorious qualities of a good teacher, because in looking at what is worthy of imitation, we profit more than we do from adverse, destructive criticism. If there be any thing so discouraging in itself, and worthless in its results as adverse criticism, especially when no better way is shown, it is yet to be discovered. We learn more in teaching by having our attention drawn to our elements of strength, than to those that mark our weaknesses, especially when it is done by one capable of judging wisely, and when it is done so as not to produce conceit.

You will all feel a little disappointed to-day, because of the absence of a portrait or photograph that was promised me, which was to be used to illustrate the subject. However, there shall be the memory, if not the form, of four teachers, continuously in the mind as we look at the features of the good teacher.

As we look back, then, along the line by which we have come, we see, among the twenty-five hundred or more of Normal School students and those with whom we have associated either as pupil or teacher, four who exhibit the qualities that shall be presented to-day.

Your indulgence is asked for, since there is no merit claimed by the one who to-day stands at his twenty-first mile-stone observing the past, and who sees many who would have been far better qualified to take observations because of their longer experience or because of their better experience.

#### NATIVE QUALIFICATIONS.

Of the native qualifications of our ideal teacher, let us remember that we are not speaking of qualities merely in the abstract, but we are thinking of teachers who exhibited these qualities, and whom we take as our illustrations.

Let us mention first the teacher of *nervous temperament*. By this is meant that power that enables one to undertake hard work and endure in the struggle. There is before the mind a teacher who exhibited this quality in a marked degree. He could not possibly have been careless or indifferent. There was nothing sluggish in his being. There was an emphasis or enthusiasm in his manner, the result of his temperament, that carried all before it. It is not difficult to see, though over an interval of many years, that flashing eye, that eager countenance, that never-tiring personality. He was the organizer, the manager, the disciplinarian, in whom, in addition, we found very high intellectual attainments.

Time will not permit more than to mention that our ideal teacher should be one of strong constitution, and of sound body and mind. We are thinking now of another who is remembered to-day as very popular outside the school room. He was one who took great interest in the boys at their games; and I remember well when he won the heart of a certain troublesome boy because of his condescension, as the boy thought, when the teacher proposed to run him a race. That teacher is remembered to-day, but it is outside the school room we see him. Our ideal teacher should be in the *prime of life*, after the rashness and conceit of youth have passed away, and before the physical weakness of body and dotage of mind have made their appearance.

That a teacher should be *punctual, orderly and tidy*, goes without saying, and these qualities we take to be native rather than acquired. What an educative influence it is to spend our early days under the influence of teacher and school room exhibiting these desirable features!

Lastly, under this heading, let us notice the teacher who was *born to govern*. There are those whose very appearance and manner

suggest power. If such have been well trained and disciplined in early days, they are naturally qualified to be teachers so far as management is concerned. There is one now before the mind, with whom it was easy to govern. There was a something that reigned supreme. It was not intellectual gifts; it was not skill in teaching; but it was merely that power that some have over their fellows;—call it what you will. Without this power, there are difficulties that cannot be overcome. And is it not one of the most necessary characteristics of our teacher? See a band of unruly boys promoted to the room presided over by this teacher. Watch them day by day. It is not long before you see them capitulating one by one and enlisting as orderly lads under the banner of their new leader. They are loyal to him, and soon they are in healthy emulation to do the most they can for their teacher and their school. This has not been secured by means that another might use with the same result. It is rather the teacher—in his person, in his strength of character, in his enthusiasm, in his dealing with those who err, than his teaching which another might copy, or his management which another might try and fail.

#### ACQUIRED QUALIFICATIONS.

Briefly, let us notice the literary qualifications of our ideal teacher. We are all agreed as to the necessity of literary training. And here let us observe, in passing, the fact that many now obtain high literary standing before entering upon their professional training. This is very essential; for it is difficult, indeed, to train to teach, one who is deficient in a knowledge of the subjects to be taught. The literary attainments of a teacher have a great influence upon the school. They render the school management and discipline easier, because of that confidence the pupils have in the teacher's knowledge. Our ideal teachers, then, are not those who have obtained their non-professional certificates at the minimum mark. A teacher can have little confidence in himself, or ought to have, who has merely passed. The pupils will soon find out his deficiencies of knowledge, and the result may be disaster. What a difference there is in the subject matter of two lessons, one presented by a teacher of superficial knowledge, the other by one qualified by high attainments. Imagine, if you will, these two teachers having Division in Arithmetic for a subject. In the one case, the subject will be presented fully and accurately, requiring nothing to be unlearned at later stages of the study of Arithmetic; in the other, the teaching will be mechanical, superficial and probably

inaccurate. Who does not remember to-day how his teacher may have discussed a certain subject? You will remember that your attention was interested in the beauty of the lesson, in the thoroughness of the work, and in a sense that genuine progress was being made.

Our ideal teacher is one who is not only fully prepared in knowledge of all the subjects usually taken up in school, but one who has, in addition, a mind in touch with all the current events. He is still furnished better if he has a knowledge of such subjects as music, drill, drawing, etc.

#### PROFESSIONAL TRAINING.

Your attention is now asked for only a few minutes to the second department of the acquired qualifications of our teacher. Under this topic we wish to say a word or two on Professional Training.

Are we not all agreed as to the necessity of Professional Training, no matter what the literary qualifications may be? It cannot be denied that professional training on a low basis of literary attainment loses much of its value. It cannot take the place of literary training, but it can make the literary training of much greater value to the teacher. It can give the teacher far greater success in his work, because he does not start at the beginning to learn by experience, but he has the experience of others which, to a certain extent, he can make use of, and do as good work in his first year, as many who have had no training could hope to do after many years.

Some are anxious to begin at once on obtaining their literary certificate. They are anxious to do their apprentice work as soon as possible, without realizing upon what material they are to practice and to blunder.

“Oh! let not then unskilful hands attempt  
To play the harp whose tones, whose living tones,  
Are left forever in the strings.”

Among the subjects of professional study, the most important is Applied Psychology. There is no study so well calculated to bring teachers to realize the responsibility of their work, because it shows what the work of education is as no other subject does.

The history of the Theories of Education is a subject of intense interest. To understand what these theories were in the past, to see what the result of their application was, and to be able to say why we teach the subjects we do at the present, is surely a study scarcely

second to any in causing intelligent interest to be taken in our daily work.

However, neither Psychology nor History of Education is our theme, but rather something in the professional course that we cannot do without, and that marks out unmistakably the good teacher from the inferior one. It is the Art of Questioning.

Of all the devices used in the school-room, to carry on the process of education, there is none demanding more serious attention to-day. It is the art that lies at the foundation of good teaching. You will readily distinguish the ideal teacher, when he is heard teaching a new lesson, by his questioning. If there were more good questioners, there would be a great addition made to the list of superior teachers.

For good questioning it is essential that a teacher has a full knowledge of the subject, and of the mental strength and attainments of his pupils.

With these requisites supplied, the teacher may proceed either with the lecture and illustration method, or by the method of question and answer. The former method cannot be used with young children to any extent with advantage. It is too formal, and it does not call for that activity in which children delight.

The method of question and answer is more difficult to carry out, and, therefore, when well done, exhibits one of the highest and most desirable arts of the teacher. The teacher, in avoiding the "telling process," often falls into a greater error by indulging in the "drawing process," when nothing is drawn, simply because there is nothing to draw. Teachers often question as if they must not tell anything, and they make their questioning so suggestive or leading that the pupils give the answer required, and yet have but little knowledge of the subject. Let another and a better questioner test the class, and what is the result? Somewhere, one day, a class was being taught in vulgar fractions. Their teacher worded all the questions after this manner, "Reduce 5 to the fraction of 6; " Reduce  $3\frac{1}{2}$  to the fraction of  $3\frac{5}{8}$ , etc." The pupils were led to obtain the required answers. A visiting teacher, on being asked to give a few exercises, proposed such as the following:—"If 8 be the unit, what number represents 5?" "What part of  $4\frac{1}{3}$  is  $3\frac{1}{5}$ , etc." These could not be solved by the class. Now a good questioner, in the teaching of the subject, would have given the pupils a knowledge that would have solved the exercises, no matter in what language they were dressed.

To question well so as to make the exercise an educative one, rather than treating it as a puzzle to be guessed at, requires long and per-

sistent practice. Some question well without much effort, while others are so superficial in mind as never to observe that their questioning is almost worthless. Who has not heard teaching conducted in a way that all that was required on the part of the pupil was to answer as indicated by the wording of the question, or by the tone and inflection of the voice of the teacher? Such questioning gives no training except in guessing. Skilful questioning requires full, accurate and organized knowledge that sees the end of the exercise from the beginning, and recognizes the obstacles likely to present themselves to the minds of the pupils. Good questioning will so conduct the class that they surmount the obstacles with ease, probably not recognizing any obstacles at all. However, it will not remove the obstacles, nor will it dodge them. Experience teaches that pupils delight in being able to master a difficulty, and in attacking something worthy of their mettle. Good questioning, again, suits the work to the class. There is nothing so destructive as questioning that is too simple and childish. It is objected to the method of teaching by question and answer in comparison with that of lecture and illustration, that the former leads to rash answering and to guessing, and that it discourages children. This objection arises from the fact that questioning is attempted when the other method should be adopted. What is the use of questioning for matters of fact, say in the teaching of history? Such should be told, and only inferences asked for by questioning. Sometimes you have heard teachers, patient and persevering, attempting to get say some word from the class. The pupils have done their best to guess it, and possibly one may be fortunate in doing so. This objection, then, bears rather on the abuse of questioning, than on its use. The objection that it is discouraging is not worthy of much attention. It is poor questioning that discourages, or possibly over-questioning. Does it discourage pupils who have been watchful and attentive to the steps of the lesson, as developed by questioning, to feel that they have been partners in the development of the subject?

Pupils take great delight in this, and our skilful teacher uses this natural tendency in the young to leave impressions of a lesson that are not made by lecture and illustration.

To discuss the subject at greater length, giving the peculiarities of good questioning, as to form and subject matter, etc., would be introducing details that are not necessary. Sufficient to say that our ideal teacher will be found to be a constant student of this art, and expert in the use of it.

In concluding, let me say for the encouragement of us all, that we may

not have many of the qualifications, that have been mentioned, characterizing any one of us, in any striking and decided way; and yet we may all have a measure of success. We can, at least, be faithful in the use of the one talent that has been entrusted to us. The conscience will be found approving and giving the reward. We can be faithful in our daily preparations for our classes, in our efforts on behalf of our pupils, and know that faithfulness will not go unrewarded. And then when the day comes, when we shall turn the key for the last time, in the door, and go out into the chill and darkness of the last night, may it be with all of us, that we shall be found in the path that leads to the light of the Eternal Morning, and enter with joy into the School of the Ideal Teacher.

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*OUR PUBLIC SCHOOL COURSE OF STUDY AND TRAINING  
AS A PREPARATION FOR THE DUTIES AND  
RESPONSIBILITIES OF LIFE IN THIS  
COUNTRY.*

JAMES MILLS, M.A., GUELPH.

GENERAL REGULATIONS.

After a careful perusal of what we might call the general or permanent regulations affecting the Public Schools of Ontario, I must say that I consider them eminently satisfactory. They are clear and explicit; and, without being in any sense arbitrary, they firmly insist on such provision for the comfort, convenience, and instruction of children in every school section, as an intelligent, progressive people and modern educational methods demand.

I do not know what more could be desired as regards sites, buildings, and educational appliances.

TEACHERS.

The teacher, however, is the most important factor in the school—the teacher makes the school. Parents know this: the children know it. It is well to have beautiful and well-kept grounds, commodious and comfortable school buildings, good outhouses, and ample equipment for the work of instruction; but it is far more important to have really good teachers in all our schools—more important in the interests of secular instruction, intellectual development, moral training, and true culture.

Good teachers are scarce—I might say, very scarce. We sometimes express our thought in the Latin sentence, *Magister nascitur, non fit*, the teacher is born, not made. The truth is, he is both born and made. Natural gifts without pruning, training and development, do not serve the purpose; and it is equally true that no amount of education, general or special, will make good teachers out of a large number of those who from year to year throng the halls of our Model Schools, Normal Schools, and Normal College. No art or device in moulding, polishing, and stamping can change copper or silver into gold.

An A1 teacher—one who possesses the required natural gifts with

broad and accurate scholarship, who has received the right kind of mental, moral, and æsthetic training ; and has had practice enough to learn the art of teaching—is rare, but of great value. Such a teacher will inspire, develop, humanize, and refine any kind of pupils. He will make a first-class school anywhere and under almost any conditions, while the one who is seriously lacking either in capacity or attainments will fail in the finest buildings and with the best equipment that money and human skill can provide.

No country, state or province has gone more thoughtfully, systematically, and courageously into the work of educating, examining, and licensing teachers than this Province of Ontario; and our Minister of Education, allowing due credit to the late Superintendent of Public Instruction, undoubtedly deserves unstinted praise for several important regulations regarding the training of teachers.

By these regulations, ample provision is made for the general education and special training of teachers, all candidates are compelled to avail themselves of this provision, the danger of favoritism in examinations is reduced to a minimum, the certificates granted are of uniform value throughout the province, and teachers of the lowest grade must study and go higher or withdraw from the profession.

Such a system ought to give good results ; and I am pleased to learn from the reports of the inspectors, that of late years there has been a marked improvement in the work done by our Public Schools—better discipline, better methods of teaching, an improved moral tone, and more refinement. So say the great majority of the Public School Inspectors, and I have no doubt they are right ; but I am inclined to the opinion that there is still considerable room for improvement. The results are not yet what we think they should be ; but we must reserve our observations under this head till we come to speak of the programme of studies.

#### COURSE OF STUDY.

*Fixed programme—First to Fourth Class inclusive.*—Reading, spelling, writing, arithmetic, geography, history, literature (selections in readers), grammar, composition, drawing, physiology, and temperance.

*Fifth Class*—The subjects of the Fourth Class continued : poetical literature, rhetoric, algebra, geometry, mensuration, and book-keeping taken up and pursued as far as time and circumstances permit.

*Optional Subjects in Fifth Class*—Botany, agriculture, Latin and Greek, French and German.

This is undoubtedly a good course of study. Some would omit one or two from the fixed list of subjects; others would add two or three; but there is much difference of opinion as to what should be added or omitted. In its present form, the course clearly embraces the most important branches of an elementary education, and when properly taught, should fit a man fairly well for the work of bread-winning and for the ordinary duties of good citizenship in a free country.

#### RESULTS.

On the whole, we may say that the work done in our Public Schools is good. The results are, in the main, satisfactory: they are a very fair preparation for the duties and responsibilities of life in this country; but I think they admit of considerable improvement.

Judged absolutely and relatively, the work of our Public Schools may, in my opinion, be correctly described as follows:

|   |                        |
|---|------------------------|
| In Arithmetic and Geography .....                       | Good.                  |
| In Reading, History, and Literature.....                | Very Fair.             |
| In Writing, Drawing, Spelling, Grammar, and Composition | Not what it should be. |

For twenty-seven years in succession, I have been examining and teaching students who have come to me directly from the Public Schools of this Province, and during this time I have been impressed with the deficiencies in politeness, and in writing, spelling, drawing, grammar, and composition.

#### COURTESY, POLITENESS, ETC.

No doubt the lack in deportment is due, in some measure, to the homes and social circles in which the boys have had to live and move; but a considerable share of the responsibility lies elsewhere. The Public School teachers of this Province are trained in the High Schools, Model Schools, and Normal Schools: the High and Normal School teachers, in the Universities; and, so far as I have seen or been able to learn, neither the Model Schools, the Normal Schools, the High Schools, nor the Universities of the Province ever make anything like an honest effort to impress upon their students the importance of refinement, courtesy, politeness, or good manners. Under such a system our Public School teachers may be true and noble men and women, as most of them are, but it is not to be expected that they will be shining lights in the domain of polite society, or that they will give much attention to the teaching of manners or deportment.

We sometimes talk about the rudeness of boys and the lack of grace and refinement in girls. We blame the Public Schools for it, and perhaps they deserve more or less censure for neglect of duty under this head ; but I think we should go higher, and place some of the blame where a considerable portion of it belongs. We should rather endeavor to impress upon those who control our professional training schools, our High Schools and our Universities, that refinement, courtesy, politeness—true culture is not a necessary result of taking notes, reading books, and passing examinations, nor a very likely product of ordinary boarding houses in a town or city.

As regards defects in spelling, writing, drawing, composition, and grammar, I think we must admit that the Public Schools are largely responsible.

#### WRITING.

For bad writing, I think there is absolutely no excuse. By proper instruction and persistent firmness, children, almost without exception, can be made to write well ; and it is much to be regretted that the results of our public school training in this important branch, especially in graded schools without a writing master, are by no means satisfactory. A large proportion of our young people are bad writers, and we are at a loss to account for the fact. I think myself that it is due chiefly to three things : (1) The frequent change of teachers ; (2) the fact that most of our teachers are bad writers ; and (3) the wide-spread and apparently well-founded opinion that the Public School Inspectors and the Departmental Examiners do not attach much importance to the subject. At the present time our children (boys and girls alike) are being taught what is known as the "vertical system"; and the result is, in many cases, a coarse, unsightly backhand, and, in others, an indescribable hybrid—backhand at the beginning of the line, vertical in the middle, and the ordinary slanting hand towards the end. To compel our girls to write this so-called business hand is, I believe, a grave mistake. What we want is a simple, neat, legible hand, without hair-strokes or commercial college flourishes, and having the usual slant towards the right, which is natural to all but left-handed people.

#### DRAWING.

The results of our Public School work in drawing are, I think, very meagre. The teachers generally know very little about the subject. They cannot draw themselves, and too much of the books prescribed

for their guidance, is devoted to geometrical drawing—what I would describe as comparatively useless exercises in making and combining circles, triangles, and other geometrical figures.

#### COMPOSITION.

For some time past our schools have given more attention to composition than formerly, and the results are better than they were seven or eight years ago; but there is still much room for improvement. The average Public School pupil, when ready or supposed to be ready for admission into the High School, does not make a very good attempt at expressing his thoughts in written language. He does not, perhaps, violate the recognized concords to any great extent; but he uses pronouns, especially the personal demonstratives, without clear and definite reference, he makes it plain that he has a very imperfect knowledge of English usage regarding the sequence of tenses, he introduces participles without, apparently, a thought as to what they limit or modify, he strings together and unites clauses and sentences which have little or no connection, seems always to forget that *and* connects like constructions, and almost invariably exhibits the most blissful ignorance of punctuation.

I am aware that it takes time and considerable practice to make one even fairly proficient in the use of language; but with equally correct example in oral and written speech on the part of the teacher, equally good instruction, and the same attention to the subject, why should not the average boy from one of our schools write as clearly, correctly, and tersely as the average boy of the same age, from a private tutor, a public school, or a board school in England or Scotland? As a matter of fact, he does not compose so well, nor with anything like the same ease; but I think the blame rests on our teachers, inspectors, and training schools.

The Model and Normal Schools devote very little time to the methods of teaching composition; the English used by many teachers in the school-room is not so correct as it should be, their written composition is often very crude, and they do not generally take interest enough in the subject to correct the mistakes made by their pupils in recitation and social intercourse; while the inspectors do not as a rule bring teachers strictly to account for defects or failures under this head.

#### GRAMMAR.

The study of grammar should assist pupils very much in composition; but it is too often a matter of mere theory, without practical

application in either written or oral speech. It is not generally taught so as to explain and impress the laws and usages of the language. Many pupils study the subject for years without learning the exact force or meaning of the terms used. The average pupil can quote the rule for the agreement of the verb with its subject ; but he does not understand in what sense or to what extent the *verb agrees*. In an exercise on false syntax, he may change *I seen it* into *I saw it* ; but he cannot tell why. He says it sounds better ; but his ear, accustomed to many incorrect forms of speech, is a very poor guide ; so he goes on using such expressions as, "I'm getting on pretty good," "Please let George and I go down town," "Will I go?" "It was them," "It don't matter," etc.—that is, studying grammar from year to year, but speaking and writing pretty much as if he had never taken a lesson on the subject. Surely this is one of the very regrettable results of loose, ineffective teaching, and one which we ought to cry out against until there is a change, for grammar, when properly taught, is one of the most interesting and profitable branches in the course of study, and is a great benefit to all students, especially to those who are trying to unlearn the vicious English which they have acquired at home and in the social circle in which they have had to move. I should like to discuss many details under this head ; but I cannot go further at present. I must, however, call special attention to one point, that is, the utter failure of the schools, High and Public Schools alike, to train our people to the correct use of *shall* and *will*, *should* and *would*. The frequent and annoying exhibitions which we have on the platforms and in the pulpits of the country furnish ample evidence of this failure.

#### MORAL CHARACTER.

After many years of experience with students from all parts of the world, I have no hesitation in saying that the pupils from our Canadian Public Schools compare very favorably with all others in morals, habits of industry, and patient perseverance—things which are, undoubtedly, of much greater importance than any of those in which I have found them more or less deficient. This, I may say, is very gratifying, and is, no doubt, one of the reasons why our Canadian boys are generally successful, wherever they go.

#### OPTIONAL SUBJECTS.

Under the present regulations, nothing is done—and nothing ever will be done—in the optional subjects. This is perfectly plain to any

one who gives the matter a moment's thought, and the reasons are manifest.

1. The standing of both teachers and pupils is judged entirely by the results of work done in the fixed course.

2. No teacher is allowed to spend more than one hour and a half per week on the whole of the optional subjects.

3. If a teacher should do some good work in one of the optional subjects, say in agriculture, domestic economy, or any other, excepting botany, he or she would receive neither money nor credit therefor.

Under such regulations, it is manifestly absurd to expect that anything will be done in the optional subjects, however important they may be; but why not make our system a little more elastic, and encourage teachers who have the ability, to give instruction in agriculture, botany, geology, entomology, or needlework? Why not give special grants for these optional subjects, as they do in the Board or Public Schools of Scotland? Say a certain sum per pupil for the average attendance of boys who have been taught elementary science or agriculture, and for the average attendance of girls who have been taught darning, sewing, knitting, etc., according to a prescribed standard. I think a change of this kind in our Public School law or regulations is greatly needed, and the sooner we have it the better it will be for both teachers and pupils. It is perfectly clear—

1. That boys in rural schools would be very much benefited by talks on minerals, plants, farm animals, and insects.

2. That it would be a great help to girls, in both town and country, to learn something of domestic economy during the eleven or twelve years which they spend at school.

3. That the ablest and best equipped of our teachers can do some valuable work under these heads without slighting or neglecting anything in the prescribed course of study.

Hence, I maintain that we should at once lay our plans for a forward movement in this direction. The great trouble with us is that we have become to some extent slaves of uniformity—so much so that we cannot think of letting any teacher do anything, however well qualified he may be, unless every other teacher in the Province does precisely the same thing. It is time that we broke the bonds of this enslavement and made an effort to encourage those teachers who are able and willing to do something in addition to the routine of the fixed programme of work.

## BETTER TEACHERS.

The one thing needed in a large number of our schools is better teachers. Furnish the right kind of teachers; pay them well; and there will be no ground for complaint about spelling, writing, drawing, composition, grammar, deportment, or anything else.

At present we have too many teachers. They are underbidding one another in the most shameful way. Hence, I would suggest :—

1. That no more permits be granted.
2. That the age limit be raised to twenty-one years.
3. That the standard of qualification be raised.
4. That examinations for Teachers' Certificates be held separate and distinct from all other examinations.

It is a great mistake to have so many boys and girls in charge of schools. We want teachers of more age and experience, good writers, with a better knowledge of English, more literary power, broader and more accurate scholarship, refined manners, true culture, and the most skilful training that can be given in Model and Normal Schools as to the best way of teaching children to be courteous, polite, and agreeable, and to show at all times the strictest regard for punctuality, truthfulness, honor, honesty, and fair dealing.

When we get such teachers, the course of study and training in our Public Schools will be a very excellent preparation for the duties and responsibilities of life in this country.

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*OBSTACLES TO A GOOD PUBLIC SCHOOL EDUCATION  
THROUGH LACK OF TIME AND OVER-CROWDING  
OF SUBJECTS.*

R. H. KNOWLES, HESPELER.

What constitutes a good Public School education? We answer:—that teaching which will best fit and prepare the children of the state to not only discharge honestly and successfully the various duties that will devolve upon them in after life, but that will fit and prepare them to enjoy life, and enjoy it, especially, from a consciousness that that life is being used in the fulfilment of that which is true citizenship. To enjoy it because they have attained a disposition to admire, and take pleasure in all that is God-created; to enjoy it because of the possession of character, unselfishness, love of freedom, self-government, courtesy, and respect for individual rights, all of which should ever be the outcome of true education. Briefly speaking, a good Public School education should give to our boys and girls a true conception of their relations to God and to society, the consideration of which should ever be primary to a knowledge of English and Mathematics. To conduct a Public School in a manner that will develop and foster those inclinations that only can secure what we have alluded to, demands time. The model teacher, whose demeanor and example may be faultless, will, unconsciously, accomplish much towards the formation of true character, yet that is not sufficient.

In the daily routine of our work there are not wanting opportunities by which we may turn our attention from the subject in hand, and have something to say that may have a never-dying effect in the formation of true character, but demanding a digression from the time table. Most of the subjects we teach afford such opportunities, but especially do the subjects of Geography, History or Physiology.

During this present year who can teach a lesson on India, Armenia, the Phillipines, Cuba, Crete, without having something to say about the unfortunate inhabitants of these countries, and contrasting, or getting his children to contrast their privations with their own comforts? Who can teach history without feeling he has not done his duty, if he does not urge his pupils to similarly contrast their own present happy condition, with the condition of those who lived in the dark ages, or

at present live in heathen lands? Who can or should attempt to teach the circulation of blood, respiration, digestion, etc., without carefully drawing attention to the wonderful and love-inspiring design in the works of creation, and to have all draw the conclusion that "we are fearfully and wonderfully made," and that "the Hand that made us is Divine?" Yet, all this takes time, more than a mere passing remark, more than our Limit Table gives us, and much more time than the requirements of the Departmental Examination will afford.

Again, who can resist, or should refrain from having something to say of the awe-inspiring natural phenomena which, in harmony with the different seasons, come to view; the flowers, the foliage, the singing birds, the streams, the autumn leaves, the beautiful snow, the gems of which, on the hanging boughs, bring to our notice those lovely varied colors caused by refraction of rays of light? Who should not try to impress that these and a thousand other phenomena "are but parts of one stupendous whole, whose body nature is, and God the soul?"

We have said nothing as to the time given for the presentation of the subjects we must teach.

First, I wish it to be distinctly understood that I am not here with a disposition to find fault, as those who have formulated our curriculum, nodoubt,gave the matter their mature consideration, but am here simply to express an opinion based upon my own experience. Furthermore, we venture to make the suggestion that there never was a time in the history of this country when there were as many well-educated young people as there are to-day, and that, too, without taking into consideration the increase of our population.

It is frequently urged, I know, and now and then by popular educationists, that the subjects of Grammar and Arithmetic are not as thoroughly taught now as they were twenty-five years ago. We feel like contradicting this statement—it is not our opinion, we believe that both practically and theoretically Arithmetic and Grammar are better taught to-day than ever before in the history of our country. Odd, difficult problems were worked by pupils then that, perhaps, could not be worked now, more the result of individual showing; then it was more the result of the application of certain specified rules; now it is a general knowledge of the subject, the application of principles, and deductive power.

Notwithstanding all, we believe, with those who propounded this subject, that there are obstacles to a good Public School education through laek of time and over-crowding of subjects, and believe, too that apart from discussing the moral topics referred to, as so import-

ant in our introduction, that there is a lack of time to teach thoroughly the subjects on the bare programme.

Our Educational Department has placed on the programme, subjects, the utility of which, and their desirability as an accomplishment we do not deny, but the introduction of which, although designed for the best, seems somewhat injudicious; and this addition has gone on till, we think, from lack of time, the best interests of our boys and girls are not secured. This addition of subjects, useful in themselves, and desirable as an accomplishment, may go on, as though the teacher, by some supernatural capacity, were all-accommodating, until all efforts towards effectual teaching of any subject may be rendered abortive.

If the farmer has a right to demand that agriculture be taught in Public Schools, has not the manufacturer, the merchant, and almost every diversity of artizan, the right to a similar recognition on demanding it? If we must have agricultural education let us have it, but with it let us have the necessary faculty and provision for the successful dispensing of it. The fact of placing the subject of Agriculture on our Public School programme, although even optional, and saying "teach it," when, in many cases, the teacher was not only, not even a farmer's son, but a young lady, or a young man from the city or town, seemed inconsistent with good judgment, and could, by no means, accomplish the end in view.

In the Educational Monthly, of July, 1880, an article appeared, taken from Queen's College journal, part of which we shall here quote:—"Year by year the list of subjects prescribed for study in the Public and High Schools seems to increase. New subjects are added, and the old ones widened until the amount of ground which the ordinary pupil is expected to get over has become quite astounding. The Department seems to be guided by the liberal principle that whatever it is, in any way, useful to know must be taught in the schools. Investigation will reveal the fact that the pupils do not study these subjects in an intelligent manner. Their knowledge of them will be found to be of the crudest, vaguest, and most disappointing kind—a mere smattering of disjointed facts, acquired at the expense of much mental effort, and retained with great difficulty for lack of connecting, meaning-giving principles. The very multitude of subjects gone over makes it impossible that justice can be done to any of them. But worst of all, the youth suffers from the want of education. The grand mistake of our Educational Department, and the ruin of our youth, comes from the endeavor to make the schools centres for administrating information, rather than for educating and developing the mental faculty. Informa-

tion, however perfect, can never take the place of education. It were better to know something definite about a few subjects, than to have an indefinite acquaintance with a great many." We shall quote no more from the article. We do not acquiesce in all the sentiment in it, which, for the most part, may be true of the pupil irregular in attendance, and below ordinary capability, but we contend that the pupil of average susceptibility, regular in attendance during school-life, goes away with something better than a mere smattering of disjointed facts, or a chaotic jumble of odds and ends. We do especially acquiesce, however, with the two latter quotations, "that information can never take the place of education," and "it were better to know something definite about a few subjects, than to have an indefinite acquaintance with a great many." We have read, too, somewhere that "education is giving the keys that open the gates of various fair domains, leaving the neophyte at liberty to go in and possess the land."

Take the example afforded by eminent, self-made men. Arkwright, Watt, Burrit, Frost, and hundreds of other constellations that shine in the firmament of fame, and what plan did they pursue? So far as our knowledge of their history is concerned, it was certainly not by pursuing the study of many subjects at once, but by the pursuit of one or two. Their thorough knowledge of the one or two subjects strengthened their desire for more, and then they proceeded on the principle of "one thing at a time, and that well done, leads to perfection," until their acquirements embraced a knowledge of many subjects, the result of the application of truly educative methods and discipline of the intellect.

Does the professional artist acquire his knowledge by the pursuit of a great diversity of work at one period of time? Does the great musician become such by practising a dozen or more different instruments each day? How does the specialist attain that which makes him a specialist?

Whilst I, to some extent, agree with the finding of the jurors at the Chicago World's Fair, "that Ontario has a system of Public School instruction almost ideal in the perfection of its details, etc., " or would it have been nearer correct had it stated "in the perfection of its generalities?" Be that as it may, our system, so far as the program of studies is concerned, is not beyond the possibility of improvement.

I have had almost thirty-two years' experience in teaching public schools, ungraded and graded, and as a result of my experience, unhesitatingly state that the multiplicity of subjects on the curriculum forbid our administering this education in a manner that will subserve

the best interests of the rising generation. In many of our graded schools, we believe the teachers, especially the assistants, have ample time, and can, and do present their subjects, not in the manner described in the article in Queen's College Journal, but intelligently, and in a manner truly educative.

In the Division of the school I have charge of there is this year a Public School Leaving class, with its dozen or more subjects, an Entrance class with its dozen subjects, and a Junior Fourth class with its subjects. We think we know how to teach better than ever before, have almost as much vigor as ever, like our work as well as ever, and can make as judicious a use of time as ever, but realize that with our best efforts, the work cannot be accomplished to our satisfaction, when the demands of the Departmental Examination have to be considered. Then how must it be with the rural teacher who has these classes and all the others down to the alphabet? Think of the number of subjects he must teach, and the number of classes, then make your own calculations, and draw your own inferences as to the time at his disposal. This is not all; now comes the Continuation Class with its multitudinous subjects, to be accommodated. In graded schools, situated far from a Collegiate Institute, and where ample assistance and apparatus are provided, we think it is well enough, but strongly object to its being introduced into rural schools, where, in the majority of cases, the necessary assistance will not be provided, and the result will be partial neglect of the junior classes, that the senior classes may make a creditable showing. We read in the regulations no provision by which the needed assistance must be provided when the introduction of the class is called for. Is this to confer a benefit?

We believe in the Departmental Examinations, and believe there are not too many; by what other means can our work be measured, and the proficiency of students ascertained? We are confident the educational interests of this country can be best subserved by the use of them judiciously carried out, our contention being that there is too great a diversity of subjects and too great a scope to accomplish satisfactorily that which we most earnestly desire. The examination, too, is a very popular institution, and the teacher who passes successfully the greatest number of pupils, is esteemed by public opinion as the most efficient and useful.

When we consider, if we have seen the correct figures, that about ninety-five per cent. of the children of this province never enter a higher than a Public School, surely the best should be done that can

possibly be done to fit them to fight the battles of life and prepare them to meet the great responsibilities of life.

Enough has been said to show that this can be more effectively done by concentrating their thoughts on the few subjects than on the many, especially on those subjects a knowledge of which is by them most likely to be required.

We regret that the narrow limits of our time forbid dilating on any part of this important subject. We are, therefore, not here to attempt formulating a program, but merely to offer one or two suggestions. What percentage of Public School pupils, after leaving school, ever apply drawing to any practical use; we think a very small percentage, and therefore suggest less drawing. Those intending to make a special use of the subject, may take a special course, which our excellent system has rendered attainable. Geography is an important subject, yet, we think it would not be difficult to compile a work more comprehensive, yet more concise in its character, one involving less labor on the part of both pupil and teacher, and yet by which a more practical knowledge of the subject would be gained than is at present obtained from our authorized geography. Regarding history, Professor Bain says "The fact that history presents no difficulty to minds of ordinary education and experience, and is, moreover, an interesting form of literature, is a sufficient reason for not spending much time upon it in the curriculum of school or college." We agree heartily with Prof. Bain in this particular. There should be a very material curtailing of the requirements on this subject in our Public School course. The report of the Committee on Resolutions, re Entrance Boards, and Entrance Examinations, page 256 of the Report for 1896 of the Minister of Education, suggest some changes which seem very practical and desirable, but which we shall not here wait to outline. What we have stated regarding the Geography text book, we repeat regarding the text book on Physiology and Hygiene, whereby less time would be involved in teaching that subject.

Less time then, we say, on history, physiology, drawing, and more time for literature, composition, business writing and correspondence, arithmetic, and moral topics, which subjects we know to be of greater importance. Then demand of us a forty per cent. minimum and a sixty per cent. aggregate of total work if you choose. There will not then be so many obstacles to a good Public School education through lack of time and overcrowding of subjects.

The teachers should not be overcrowded. Like the artist, who intuitively feels that he sees through and beholds the formation, and

motion of every nerve, muscle and joint of the individual whose portrait he is about to paint, so the teachers should have ample time to prepare each subject. The feeling that he has a knowledge of his subject, and a desire to present it, from a consciousness that he can make it interesting should pervade his every faculty. He should have, as was said of Lowell, a disposition sloping to the south side. The consciousness that he is overcrowded, and undertaking more than can be satisfactorily accomplished is antagonistic to this disposition. The teacher is "a being subject to like passions as other men," and wants his periods of recreation, whether they be occupied with bat or ball, wheel or canoe, it matters but little.

In conclusion, let us conscientiously make the best of our circumstances and opportunities. The longer we teach the more firmly we are convinced that almost absolute silence is the most desirable condition to obtain in the school room during the greater part of its exercises, that silence amid which alone, careful thought may generate and grow. Let us secure the performance of certain mechanical duties of the school room—punctuality, regularity, obedience, silence, good listening, although eternal vigilance is the price paid for securing them, yet once secured we shall find ourselves in possession of much time that we don't otherwise seem to have.

Let us have an unselfish devotion to our work, and place our best manhood behind the performance of our duty, and our labors will not be in vain.

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## KINDERGARTEN DEPARTMENT.

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### FIRST GIFT.

MISS M. E. PATTERSON, TORONTO.

Students in the Kindergarten, sometimes, seem to find a difficulty, at first, in using the balls with children in the Kindergarten.

An experienced Kindergartner, however, usually succeeds in having a delightful and educative play with the little ones. "Why is it?" Is it not that the experienced Kindergartner is *ready* both in *mind* and *heart* to respond at once and *truly* to the expression of life from the child in his *free* play?

With the ball she is ready to meet him with little fancies and touches of nature, with songs and little games which are connected closely with his own experiences, and which are vitally in connection with his relationship to nature, man and God.

She is able to lead his indefinite activity into definiteness and united action with the other children. She puts a purpose into his indefinite expressions. Then it is wise for a student of the Kindergarten to prepare *herself*, as broadly as possible, for her ball plays with the little folks.

It is well to think about the *object* of the First Gift. It is two-fold.

OBJECT. { To stimulate observation,  
          { To lead to self-expression.

Also the Salient Characteristics of the Gift, *i.e.*, *Unity and Mobility*.

We emphasize the Salient Characteristics of the Gift, that the child may *early* learn to distinguish salient and permanent from accidental and transitory qualities. First present the ball as a whole—as a unity. "Why?"

ANSWER.—(1) To concentrate attention.

(2) The idea of unity should always precede the idea of variety, as *unity* should be conceived as the basis from which variety is evolved.

(3) Objects should be presented in *rest* before motion, that the mind may not be confused.

(4) We should endeavor to lead the child to a love and reverence for his dear little plaything.

"Now we will present the *ball* as a *unity*."

"Will you all kindly be little children for a short time (holding up the ball ?")

"Here is a little visitor who has come to play with you." "Get ready to greet her." "She loves to play with little children." "She will say good-morning to you."

Teacher, holding up ball—red or yellow,  
sings

"Good morning dear children,  
Good morning to all ;  
I can dance, I can fly,  
I can hop at your call ;  
Whenever I come I'm your own little ball,  
If you will be careful and not let me fall."

Now, children, how will you say good-morning ?

(Lead to a hearty shake of the hand), while the *children* sing

"Good-morning little red ball,  
We're glad you've come to-day ;  
For we are very happy,  
Because we love to play."

Another little greeting song is:

"Now the ball comes around to meet us,  
Could it speak 'twould surely greet us,  
Wishing us a sweet good-day,  
As it wanders round in play;  
Now it's coming, now it's going ;  
While our cheerful song is showing  
That we're very happy all,  
Playing with the wandering ball."

Now we will present the *ball* in *movement*.

Sometimes it is best to play with a *single* ball for a short time.  
"Give one ball to Freddie." "Tell me what it is doing, Freddie."

ANSWER.—Swinging (or, perhaps, it may be another movement up and down, etc., whatever movement it may be, meet it with song or game.)

(If answer is "Swinging," sing little song):

"Swinging, swinging,  
Pleasure bringing  
By my swinging  
To and fro."

The little ball would like *Annie* to give her a swing (repeat song and movement), and so on all around the class, sometimes *counting* as it swings, and sometimes leading the child (who swings the ball) to say a little *rhyme*, or sing a little *song already familiar*.

#### SELF-EXPRESSION.

Give each child a *ball of one color* at first, as it leads the children to be familiar with the colors *singly* before using them together, leading to a *love of each color*, and a love and reverence for all the balls. (Teacher sings as she gives out the balls.)

“ Your little hand, my child, show me,  
I give this pretty ball to thee,  
Now close it up, and let it rest  
Like birdie in its cosy nest.”

“ Now you may all play with the dear little balls.” (Allow children to play quite freely, and have a very happy time. Watch carefully. Meet, perhaps, the most definite expression and lead to a unity of action through interest and play).

One of the most popular movements with the children is winding up the ball, round and round on the table, then holding it up high and watching it intently until the motion gradually stops.

To meet this there are one or two little songs and games which the children are very fond of. “ If they call it a *top*.” Song:—

“ I never can spin, I never can go unless I’m twisted up you know,  
So twist me round and you will see what a dear little top I’ll surely be.  
Around, around and around now spin, you’re better than a top that’s made of tin,  
For when you’re tired of play open your hand and I’ll jump in.”

Another movement is *Over and Back*. Sing:—

- (1) “ Go over, come back here, so merry and free,  
My playfellow dear, who shares in my glee.”
- (2) Bell high in the steeple, etc.
- (3) Game ponies jumping over gate—“ over-back”—“ over-back,”  
round and round like a wheel.

Children sometimes call it a *pin-wheel* or *cart-wheel*.

- (1) Rolling, and rolling over it goes,  
Carrying the cart where nobody knows.  
The cart it carries a load of hay  
To give my horse some dinner to-day.  
Rolling and rolling, over it goes, etc.

This cart has cans of milk so white,  
 To give my children some supper to-night.  
 Rolling, and rolling, etc.  
 The grocer cart brings sugar and tea,  
 And flour to make nice cakes for me.  
 Rolling and rolling, etc.

*Up down, up down.*

One, two, three, the little ball is free,  
 "Up, up my little bucket comes,  
 From the deep, dark well,  
 It's full and running over,  
 Now, what it brings, who'll tell?"

"It brings up sparkling water,  
 So pure, and cool, and sweet,  
 To wash the children's faces  
 And little, dancing feet."  
 Up, up in the sky the little birds fly, etc.

Children very often swing the ball *right and left*.

*Clock songs* always give pleasure to children, Rock-a-bye-baby, etc.  
 Oriole's nest—baby birds swinging on branch of tree—tra-la-la etc.

*Electric light*, left, right, left, right,  
 See me swinging all the night,  
 For the people here I stay,  
 That they may work as through the day.  
 Left, right, left, right,  
 I'm a bright electric light.

*Tup-tap* is another frequent movement.

"A little woodpecker am I,  
 And you may always know  
 When from the tree I'm seeking food,  
 For tap, tap, tap; I go.  
 "The horses all trot down the street," etc.  
 "Hopping birds, frogs," etc.  
 "Raindrops," etc.

*Christmas time—Stockings, form of Ball.*

"See the little stockings  
 Hanging in a row,  
 Red, and blue, and yellow,  
 What a pretty show.  
 Now we'll feel our stockings,  
 What's this in the toe?  
 Mine feels like a pussy,  
 Soft as wool or snow."  
 "What's in your's?" etc.

Children always love the little hiding games with the ball. There are several little songs. One favorite is:—

“ Little ball, pass along,” etc.

I think you are all familiar with it. If the signal from the piano comes to *stop work* while the children are in the *full enjoyment of their play* they will more readily *welcome* the ball when it comes to play again.

A soothing little good-bye song is, (children sing):—

“ Dear ball, you’re tired of play,  
So good-bye for to-day :  
Into your little nest now creep,  
And then you’ll lie quite fast asleep,  
But, when you hear me call,  
Come back, dear little ball.”

My assistants have found some of these little songs and games helpful in playing with the balls. Later they make their own or choose their own songs and games, and we are always glad when we can lead the *children* to make a little rhyme or game for *themselves*, or sing one that is already familiar from their story or picture-books at home.

#### COLOR.

We endeavor to lead the children to love the bright colors more and more, gradually coming to know them, having the *sensation* and *perception* of colors *precede the naming* of the colors.

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*COLOR—ITS RELATIONSHIP TO KINDERGARTEN  
DRAWING.*

MISS MIMA SMITH, HAMILTON.

Ruskin calls color divine. While we may not wholly agree with all he says of color versus black and white, or in his condemnation of black and white, yet such words by so wise and great a man are worthy of thoughtful consideration, especially by us—students of the development of race and individual.

The child's first activities are physical, but when the windows of Mansoul are opened and the wakening child looks through them on the outer world, light and color attract him. He sees beauty—feels his need of it, claims, appropriates, and grows thereby. That soul hunger which impels the little hand to reach for a pretty ball, is quite as genuine as that other hunger impelling the same small hand to reach for food. In both cases there is necessity of life and growth in the child's own nature craving nourishment, without which, it will not develop. A brightly colored ball attracts baby at an earlier age than one of neutral tint because it appeals to his inner self—to his feelings, arousing and satisfying hunger, thus contributing to intellectual and spiritual growth.

Why is color important to us? What is the reason for its existence? Physically we could supply all our needs and be in perfect health without apprehension of color. Scientists tell us the universe could have been planned without it; were there no color, we could still classify materials through their other common qualities. Why, then, did the Divine Being make color with its wonderful variations universal, instead of one vast neutral tint? For many reasons, primarily, perhaps, because He loved beauty, and man being created in His image, "In the image of God created He him," we find the same desire and necessity for beauty in man's nature. To satisfy this need—foster and develop this love, and lead toward spiritual beauty, of which the physical is but a shadow, the Father hand scattered the beautiful in abundance. Color, then, is a matter of importance from babyhood to old age. Therefore, Froebel gave color a place in his system. We are considering color work, then, not from the stand-point of the abstraction of color, or of leading the child to know and classify colors, though that is necessarily involved. We are consider-

ing it as something the human being will appreciate and enjoy through his feelings, his sensations, apart from culture. A sympathetic element, through its co-respondence to his inner being, wakening a sense of need which it in turn is prepared to satisfy. A harmonizing element, modifying, softening, subduing, unifying the contradictory and antagonistic elements of his own personality; his restlessness, nervousness, irritability, self-consciousness, and merging them in a pervading idea. A mediating element, linking him by desire and will to the object, thus enabling the child better to take possession of that outer world—the non ego—appropriating it to his own use and pleasure, and finally apprehending and reproducing it, or, so far as his own individuality, consciousness and activity are concerned, evolving from it a new creation. We may call this inner necessity universal. We find it evidenced, to our dismay, in the free use any child will make of a colored chalk or pencil and we exclaim, "how unsightly;" no, not from the child's standpoint, it is far more beautiful to him than the neutral tints he has marred. He needs knowledge, education—O yes, but he desires color as he does not desire education. Knowledge says, "This is red, with its shades and tints," but the inner nature, recognizing its desire, without seeking a name, cries, "I want that." It is really the king within the child bestirring to assert lordship over material; color has appealed to his sense, and "the child is so absolutely at the mercy of his senses for the first few years of his life." Knowledge, as we use the word, is beyond him yet, he does not cognize it, only the little close to what he already possesses can he grasp or utilize for his pleasure, but there is a co-response between himself and the color pencil, he feels quite capable of using it, for, in his eager appreciation of color, he is quite certain it will beautify everything it touches. It requires more education to admire black and white. The wee baby, who will pay no attention to black and white, will reach out its hand for a colored picture. Obviously, love of color is inherent in the race. In ourselves we find the same principle, educated more or less, it is true. The sunset glow is a benediction to the child, and we never get beyond the need of its blessed ministrations. We find other food—work for it, as the child cannot, except in a proportionately smaller and smaller degree. A brilliant sky, or other object of beauty, produces upon us an immediate effect, without conscious effort, according to its character and ours. A book, requiring more education, more development, to appropriate, may produce a like effect, may deal with the selfsame subject and thrill the whole being with delight, but only through

conscious process and effort we obtain the result, grasping little by little, first, that which is nearest, whereas of color beauty we take immediate possession. The fact that the effect produced may deepen, strengthen, modify or even change, for longer looking does not alter the immediateness and effortlessness of the sensation and influence, detail, *i.e.*, education following. In the color beauty we received at once impression of the whole in its unity and harmony. In reading, the harmony and unity of the whole was not felt, consequently could not influence as a whole till details were noted, and combined, which requires process. The higher the development the more easily we acquire the good of the final unit. In color beauty there was, first, result; second, detail; in reading, first, detail; second result. The child's need and ours are intrinsically the same, therefore, present to him that which he can assimilate.

For the child, in his development, black and white bears the same relationship to color that words alone do to their music, the one appeals to the intellect, and through that to the feelings, the other, viz., color, likewise music, appeals directly to the feelings, and through those to the intellect, arousing and educating. Through his feelings the child is conscious of life, and life is a delight so abundant and overflowing that the "non ego" becomes pulsate with life. "Her music seems to quiet the children," said one kindergartener of another. "Do you notice how quiet they have grown?" said another, as the children gazed upon a beautiful picture. Color, then, makes a deep impression on the child. But the child's impressions, to bring him to a distinct and clear consciousness of his possessions, and to make them of full value to him, must become expressions. Have you an idea, a thought? Try to express it and so give yourself certainty. Express it by word or pencil, brush, chisel, music—whatever medium you choose; express, embody your thought, that you and others may look upon it. Then, if your thought is in harmony with the All Father's thought, the world is enriched, but you far more. Your possession becomes definite while other indefinites appear on the horizon, to which you, Columbus-like, may go forward, and there plant your standard with the right of kingship in yourself. Your standard not another's. You are enriched to all eternity. As with us, so with the child, I dare not say in greater degree, it is so emphatically true of ourselves. Our nature and child-nature are the same, the race nature.

Motion is characteristic of life, its inevitable necessity. The dead move not. Through the response of life to its semblance, motion

attracts the child. Life tends towards, must have self-expression or fail to expand—retrograde, and in proportionate degree death holds or takes possession. Movement, life's earliest manifestation, naturally became first and universal language. We gesticulated, but the language was evanescent, supplying only transient need. The growing race, feeling greater requirements, struggled for utterance more facile, accurate, durable, attaining the pictured thought. Drawing, an universal language, mediating object and word, resembling the one, interpreting the other, representing both in visible form, and requiring higher development than its predecessor gesture.

The child's strongest impressions are the most clamorous for expression. What attracts to the ball first? movableness and color, which most it is difficult to determine; logically, movement, certainly both combined sooner than either alone. For movement he has ready self-expression in gesture, but what about the color impression? likewise needing expression. He models, draws with lead, sews colored wool, folds, cuts colored papers, and feels that he has expressed form, direction, to some extent color, but only to some extent, with regard to direction and form he feels himself active agent, creator, regarding color in his work he does not so feel, and longs for lordship more nearly akin to creatorship. What wonder if, eager with soul-hunger for self-expression, a medium suddenly being discovered whereby this longing may be satisfied, the dainty green leaf or bright blossom has been crushed and its color painstakingly transferred to some fair treasure? Our superior culture gazes in astonished horror. "How could you?" Hold there, the child was aching for creatorship in just that direction, you did not supply the means for satisfying his need. You gave him bread, milk, love for love, but this need so imperative—Be not angry, workings of genius begin in like manner. He sees color everywhere. It impresses, reimpesses him. His mother's cheek, the apple, sky, grass, water, trees—color, color, color, do regard his need, supply a medium for materializing his impressions satisfactorily, profitably, less dominated by material, this we find in colorpencil or watercolor. The former, though not giving as perfect expression as watercolor, suits our purpose better, combining the characteristics of simple drawing with the sympathetic element of color. We read Kindergarten drawing bears directly on design, indirectly on all other drawing. Should this be so? Did not Froebel base his system on the development of the race and individual? The race began with representing the object. Thus, graceful curves, beautiful forms and fanciful intricacies of line in all designs are traced back to branching tree

—leaf, blossom, crystal and living creature—nature. Race development did not begin with emphasis on design, but on reproduction of impressions received from environment. This is a tree as I see it. That is a man as I see him, in so far as I have power to tell the story. In drawing, should we reverse the process used to assist development in other directions? This is our query, this our problem. Froebel would say, develop the individual according to development of race.

When first introduced do children heartily admire vertical lines of net-work—1, 2, 3, 4, 5 lengths? To do so requires education. Call them soldiers—what you will, they still will lack the sympathetic element. The child's ideas of vertical lines are not clamoring for expression, as are his ideas of color. Moreover, as a beginning, vertical lines require too much. The child must carefully attend to manner of holding pencil—carefully to make vertical line, carefully to place it on blue line, carefully begin at one point, and carefully end at another. What wonder if the little fingers tightly clutch the pencil, or the attitude suggests tension or indifference, instead of the healthy interest of a child naturally representing the things which have impressed him. Is, then, the color pencil to displace the lead pencil? Decidedly no. Each has its own place in developing the child. Emphatically they are co-workers, each influencing as the other cannot. When wishing to emphasize form, or insure correctness of outline, lead is preferable, lest beauty of form be lost sight of in beauty of color, so preventing self-criticism (an important factor), and leading the child to satisfaction in imperfect work. For the same reason we use it in geometric forms, and designs of every kind. Its tendency being to greater accuracy, it becomes an invaluable assistant to the color pencil, in rendering the effects required. Froebel's net-work furnishes at once an ideal, and an easy means of attaining exactness, training both eye and hand—"An external guide," the old occupation book calls it, and we acknowledge it good when the child is ready for it. It bears directly on design, consequently on trades, manufactured articles, on the thousand and one things which present civilization demands, consequently is of great importance, as preparing the child to stand steady and strong in life's whirl—a producer valuable to himself and the race.

After working with colored representations of life, we take lead pencil and net-work to help us in designing. The beautiful form constructed, we may embellish with color, or the outlined thought be changed by color to its more explicit surface representation.

Lead pencil assists better in abstraction of outline, consequently in

representation of outline as we see it, *i.e.*, linear perspective, but color is needed to complete thought, expression, we use black to assist in abstraction of light and shade from color; so studying its relative degrees, but use color as the only factor whereby we can portray light and shade as we see it. So to gain greatest good we need use both mediums and lines of work, representation preceding and assisting design, design assisting and perfecting representation.

Froebel begins with the ball in solids, so in representation on surface begin with the ring—a linear ball, consequently a delight. Freedom of movement required reduces advice on holding pencil to minimum. The ring, while giving definiteness to the child's aim, assists him by its limitations, makes very obvious the necessity for care, allows freedom of starting point, sympathetically assists to stop at proper terminus, quickly yields fruition of effort, a completed whole; furnishes an attractive and perfect ideal wherewith to compare his attainments, and on an easy basis of comparison, because of similarity of dimensions. This being a new experience to the child, the simplest and least distracting medium possible is best—lead pencil. Color would tend to hide from him defects in his work. Next a colored ball to foster freedom and elasticity of movement, with round and round motion of pencil above hand, and then on paper. Praising and encouraging only round and round movement, finally adding the string—a vertical line. His experiences form now this sequence, round in movement, outline—surface representation with color, and a vertical line of great interest. To this add variety in unity, using the round as basis to assist observation and classification. *Form* is to be emphasized and the *number* of objects, rather than complete or perfected representation of the individual object, so using lead pencil make fruit, moon, plate, etc. New elements—additions, changing circles into life forms.

This plan is not supposed to interfere with the free illustration of songs and talks, or reproduction of stick exercises. To songs and talks belong life forms from the circle. In illustrations already indicated, the child notes the object, classifies it as round, reproduces, according to capability, the typical form, adding his idea of its individuality, but he will not, cannot, treat animal forms from the circle in like fashion; the pig is not ball-like to him, he has no idea that a circle can minister to his desire for self-expression in this direction—the revelation must come to him through a reverse process. You stand at the board, bright eyes watch eagerly. "I will make a picture for you." (Cat from circle), often before the final touch you hear a cry

of delight : "I can do that," "We can do that." He has not classified the object as round, but has found that the circle, with additions, will represent objects other than round. Consciousness is dawning within him, that on surface we represent objects not as they are, but as they appear, reality being very different from representation, making a circle he pictured a ball, "but this!" Make a circle, and lo a cat. Contrast between object, and representation is strong. Here form of outline is important. New possibilities and representation of life yield satisfying interest. We do well to avoid distraction of color—use lead pencil, continuing sequence, for greater freedom and ease of movement—empty bird's nest, child's aim—effective work, give color-pencil. Next egg-filled nest. Tinted fruit claims attention during autumn—shade lightly, blending lines, noting coloring of model.

Supplying child with designs, I aim at outlines which he cannot satisfactorily make himself, his individual self-expression exercising in coloring picture ; the outline being what Froebel calls his net-work—"an external guide," leaving child free to concentrate attention mainly on direction and execution.

Subject on card, "Orchard fence with apple branch," connects with life and delightful harvest experiences—ladder with fruits suggests activity. Child may revel in color utterance, while fence supplies exercise in vertical, with freedom of movement, and sympathy unknown in first experience of same on checked paper.

*Do* branches, first, for expedient, but even more for sympathetic reasons, next, cross-piece to which boards are nailed, then board at extreme left, etc., making outline with heavier stroke, and vertical lines within each distinct and separate for utility of exercise, and to avoid injury to the child. Blending of lines at this stage, although it may improve appearance, will not do so at cost of hiding defective work, so causing loss of ideal—a vertical line, and interfering with self-criticism ; thus, inducing careless vertical lines elsewhere, finally nail boards, and set up ladder. Let child outline and reproduce his picture free-hand.

For fruit and draperies blended lines are preferable. These principles apply to lines in any direction, also to any subject or season.

## TRAINING DEPARTMENT.

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*(Presented in 1896.)*

### \*SCHOOLROOM FATIGUE.

S. B. SINCLAIR, M.A., OTTAWA NORMAL SCHOOL.

The content of fatigue study naturally falls into three divisions, physical fatigue, mental fatigue, and the relation which each of these bears to the other.

All of these mines have been so thoroughly worked that with present methods there is little hope of evolving anything dynamic that has not already been brought to light. A few of the most important conclusions arrived at may be briefly referred to at the outset as furnishing interesting and valuable data upon which to base an inquiry into the subject of School-room Fatigue, the special form with which the teacher is more immediately concerned.

The student will find a complete bibliography and digest of investigations by reference to articles in the Pedagogical Seminary of June, 1892, and to published lectures by Dr. Cowles, of Boston.

A number of significant experiments in regard to shrinkage and recovery of nerve cell contents were made by Dr. Hodge, and recorded in the Journal of Morphology of Clark University. In experimentations with frogs and cats, electrical stimulation of nerve going to a spinal ganglion produced a marked shrinkage of nerve cells, the nuclei being reduced forty per cent. after five hours' work. After complete rest of six hours the cell had recovered about half of this shrinkage, and twenty-four hours elapsed before it had regained its original condition. Experiments with cases of actual work, instead of electrical stimulation, revealed a still greater shrinkage.

It has further been shown that the expenditure of muscular or of nervous energy is always accompanied by the formation of poisonous waste products. In either case there is always excess of uric acid in the blood. When the blood of a fatigued dog was injected into an untired dog it produced in him all the signs of fatigue.

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\*This paper was held over from last year's report, and is accompanied by a summary of further investigations made this year upon the same subject.

It has also been demonstrated that a muscle worked to the fatigue point by voluntary stimulation, may then be made to contract by electrical stimulation, and after a time again be innervated by the will. In this way Mosse kept a muscle constantly at work. It would seem that the nerve rested during electrical stimulation, for it began work with renewed energy after the interim.

Dr. Burnham points out the following analogies between muscular and nervous fatigue.

1st. To do the maximum amount of work muscular or nervous intervals of rest must alternate with periods of work.

2nd. Working a fatigued muscle or nerve injures it much more than much greater work under normal conditions.

3rd. Remarkable individual differences occur in the curve of fatigue of muscle or nerve of different persons.

Nervous and muscular fatigue have been studied separately but there is an intimate connection between the two, and each influences the other. Severe mental work lessens muscular energy, and when certain muscles are fatigued, it is found that others are affected injuriously, as by transmitted toxic effects.

The results of Psychological and Pedagogical investigations have been quite as valuable as those from the Physical side. Dr. Cowles arrives at the following conclusions:

"In normal fatigue it is to be kept in mind, that the dual physical condition is one of the expenditure of nervous energy in work to the immediate fatigue of nerve cells, and the accumulation, locally and in the circulatory system, of toxic waste products ; and that the processes of nutrition and elimination require time and rest. The mental concomitants of this condition are ; a diminished sense of well-being, or a feeling of fatigue, sometimes amounting to a sense of ill-being, which includes in its complex causation the influence of the toxic elements. The emotional tone is lowered, and there is less vivacity of feeling. There is also lessened mental activity in general. Voluntary attention is fatigued ; that is, the mental inhibition is lessened, with diminished control over the attention, and one is conscious of an extra sense of effort in mental work. There is 'mind wandering.' The logical processes work more slowly and with less effect in making comparisons and judgments, and in reasoning to conclusions ; the tired attention holds on with effort to one member of a proposition, while another slips away. There is a consciousness of mental inadequacy and difficulty in keeping awake. This is the common experience of evening tire."

The investigation has brought prominently into view the abnormal condition of acute fatigue called Neurasthenia, a disease which is unfortunately, becoming very common in America. In the initiatory stage there are the ordinary symptoms of fatigue, but by constant over pressure these conditions become intensified and sometimes entirely changed. There appear the symptoms of irritability and languor, dilation of the pupil of the eye, cold hands, poor appetite, insomnia, lowering of emotional tone, a sense of ill-being, excessive introspection, morning misery, second day tire, etc. The subjective symptoms are arranged by Dr. Cowles under four heads:

(1) Depression of spirits; (2) decrease of power of attention; (3) morbid introspection, retrospection, apprehension; (4) diminished sensitiveness.

The worst feature of the case is that there is at times "Anaesthesia of fatigue." The patient is not a guide to himself. The disease grows upon itself. The patient is unduly ambitious and anxious, and quickly uses up all the little vitality regained.

The purpose of this paper is to give a summary of a number of experiments, in regard to school-room fatigue, conducted along the lines instituted by Galton Birkenstein and others. The experiments were made in Truro Normal School, Nova Scotia, and in Ontario Normal and Public Schools. The returns were answers to a series of questions sent to one hundred and twenty teachers.

The following is a summary of questions and replies :

First Question—What prominent symptoms of fatigue have you noticed in yourself or in your pupils?

(a) In regard to the effects upon the senses, the usual answer is that hearing power is diminished, especially in cases of partial deafness. One writer says "I experience difficulty in understanding the speech of others and frequently mistake one word for another. The effort required to catch what is said becomes a decided strain. The sounds seem less sharply defined and to run into one another." In some cases, on the other hand, power of hearing is increased, producing extreme sensitiveness to slight sounds not noticed under other conditions, especially in cases of monotonous repetition, *e.g.*: the ticking of a clock, the sound of violin practice, sipping sounds at meals, etc. Sight is not so keen as when rested. Reading becomes a conscious effort, one word or letter being frequently mistaken for another. A burning sensation of the eyes is experienced. Speaking generally, the power of attention, in sense perception, by which the raw material of sensation is developed into a knowledge of an object located in space, is

diminished. In other words, the analytic synthetic function of mind, the power to interpret sensuous data, to unify, discriminate and relate, works at low pressure. On the other hand inhibition is weakened. Sensations which we do not wish to receive, and to which we refuse admission, become importunate and at length enter at the too weakly barred door of consciousness. One teacher remarks, "the hearing power of the teacher increases in direct proportion to fatigue, but that of the pupil apparently diminishes."

(b) Memory is much impaired. There is inability to spell common words, and especially difficult combinations, such as "ei" or "ie". One teacher says, "Children seem unable to remember the simplest facts when greatly fatigued." There is a report from a student suffering from Neurasthenia (aggravated by insomnia) who did not sleep during four nights immediately preceding an examination on which she wrote. She says: "When writing on memory subjects, I had only to keep myself quiet enough and memory came to my assistance, but I found subjects demanding clear and logical reasoning much more trying." After the two days examination this student took a visual memory span test. She says: "I had, in the interim, been out of the examination room only a few minutes, but long enough for the reaction to set in, and my head had begun to ache. With the first set of twelve letters I got eight right, with the second five, the third and subsequent spans seemed to vanish when read." This student secured honors on examination. She is still suffering from Neurasthenia, but, so far as can be observed, the disease was not specially aggravated by the examination experiment. She holds that the extra strain was not more injurious than the worry from the feeling that she had not been able to take the examination would have been.

(c) Thought-power is quite as much diminished as memory. The following symptoms are noted: Inability to concentrate attention, failure to obtain ideas readily from reading, inability to solve simple exercises in mathematics or in common sense problems of any kind, a tendency to wool gathering, dissipated attention, a long time spent in trying to understand what is self-evident when the mind is not fatigued.

(d) The moral sense is weakened, there is a tendency to violate rules by passing them unnoticed, *e.g.*, ordinary acts of politeness, also to yield to temptation more readily, *e.g.*, to "crib" at examinations. There is inability to control temper or to keep thought from responding to improper suggestions. In reply to the question, do you find

moral power weakened as the result of fatigue, ninety per cent., answer, yes.

(e) Under general sensations of fatigue are mentioned, headache, accompanied by feeling of fullness in brain region, flushed face, color-blindness, sore eyes, heavy eye-lids, burning cheeks, cold feet, drowsiness, irritability, inability to give attention, loss of power of muscular coordination and inhibition.

The results are much the same as those recorded by Galton, in his resume of replies to questions asked 116 teachers in England, recorded in the Journal Anthro. Institute, 1888, p. 157. In reply to the question, when you are physically tired do you find that you are lacking in mental vigor, eighty-one teachers answer yes, fourteen answer no.

To the question, when mentally tired are you physically weakened, sixty-seven answer yes, twenty-eight answer no.

To the question, what is the most prominent symptom of mental fatigue, thirty-nine students out of ninety-five answer "headache."

Second Question: What work can be performed easily when the mind is fresh, which is found to be difficult when the mind is fatigued? The usual opinion is that fatigue lessens power to do all mental work, special weakness being noticed in power to commit to memory and to recall old knowledge, *e.g.*, history, dictation. There was considerable difference of opinion here. One report says, generally all work requiring concentrated attention, more particularly such work as demands original thought, *e.g.*, deductions in Geometry. Another says, a pupil with strong reasoning powers will notice less difference in the fresh and fatigued conditions in working common sense problems than he finds in memorizing, while one with strong retentive power will find little difference in memorization rate, but will be unable to do anything difficult in reasoning if fatigued.

To the question, which do you find the more difficult, memory work or thought work, (meaning mental constructiveness), sixty-four teachers out of ninety-five answer memory-work, thirty-one thought-work. This would seem to accord with Dr Bain's contention where (in Education as a Science, p. 23) he says: "The plastic or retentive function is the very highest energy of the brain, the consummation of nervous activity. To drive home a new bent, to render an impression self-sustaining and recoverable, uses up more brain force than any other mental exercise.

Third question: At what time of day is the highest mental activity? There were a great many tests made with classes during

school hours. A class of thirty-three boys averaged forty-one per cent. on mental arithmetic at 9.35 a.m., and twenty-three per cent. when fagged after an examination in history, at 12.50 a.m. The tests in this case consisted of similar problems with figures changed. The highest mental activity seems to be, with ordinary school conditions, in the early part of the morning, at the beginning not so high, but increasing to the maximum at about the end of the first hour. That is, the highest efficiency is usually reached from 9.30 to 10.00 a.m. The next highest period is probably from 1.30 to 2.30 for senior pupils, but with very young children the morning is better than afternoon. Individually, there is great difference of opinion, answers about evenly divided between morning and evening for adults. Many give late in the evening, from 9.00 to 12.00, or even later, especially when they have had full sleep the previous night. Some state that the mind is clear to understand what is presented in the morning, but rather passive as regards ability to do original work. In reply to question two, ninety-four teachers answered as follows: 1 at 4.30 a.m., 1 at 5.30 a.m., 8 at 6.30 a.m., 9 at 7.30 a.m., 4 at 9.30 a.m., 13 at 10.30 a.m., 5 at 11.30 a.m., 4 at 7.30 p.m., 10 at 8.30 p.m., 16 at 9.30 p.m., 7 at 10.30 p.m., 9 at 11.30 p.m., 7 at 12.30 a.m.

Fourth question: To what extent does change of subject take the place of rest? The usual answer is, change of subject, when the change is radical, rests in the same way as change of position, *e.g.*, a change from a thought subject, such as arithmetic, to a manual one, such as drawing, affords relaxation. A primary teacher writes: "An entire change of subject is as good as a rest, often better." Change of subjects requiring similar activity of mind, *e.g.*, arithmetic and algebra, affords but little rest. Change of subject after much fatigue does not furnish rest to any great extent. Of ninety-five teachers, ninety answer that in fatigue they reach a point where change of subject does not afford rest.

Fifth question: What results follow from detention at intermission or after school? Some answer: "Pupils detained at intermission and after school are less able to do good work, unable to concentrate attention, restless, show that they feel aggrieved, stubborn." "Perfunctory work, sullen and spiritless manner, loss of elasticity and responsiveness, follow as a rule."

There is great difference of opinion. One teacher says, "Detention after school is a mistake, mentally and morally." Another says, "Detention is the proper remedy for lateness or carelessness. Pupils accept it as the discipline of consequence and no evil results follow."

All agree that if pupils are detained at intermission, they should be given time for physical exercise apart from the class at another time.

In answer to the question, do you find detention at intermission unsatisfactory, eighty-one out of ninety-four answer yes.

Sixth Question: How much time should be devoted to intermission, and how should this time be distributed throughout the day to secure the best results for your class?

Some answer, for young children short recesses at least every hour. For older pupils, one recess of fifteen minutes in forenoon and one in afternoon.

A short recess of five minutes every hour provided pupils could have access to playgrounds or gymnasium.

Some allow two or three minutes at the end of each period for change of position, when pupils are allowed to communicate, etc. One teacher recommends for intermediate pupils from 9 a.m. to 4.00 p.m. for working hours, with two and a half-hours recess as follows: 9.50-10.00, 10.50-11.00, 12.00-2.00, 2.50-3.00.

To the question, do you think that in country and village schools as much work would be accomplished in the day if there were one and one half-hours noon intermission, instead of one hour as at present, fifty-nine teachers answered yes, and thirty-four answered no.

The problem regarding the proper length of the school-day (notwithstanding the experiments of Dukes, Birkenstein and others) is still unsolved, and has indeed little data collected as basis for solution.

Seventh Question: Is resulting mental fatigue greater when pupils are allowed to remain standing during recitation than when allowed to remain sitting? In general the answer is: Pupils show all the evidences of great mental fatigue if compelled to stand during entire recitation, especially if recitation be long. With small pupils, this is not so noticeable, especially if the lesson is short.

Eighth Question: What fatigue symptoms follow from working in a room at too high a temperature? The following are noted: "Headache, disinclination to work, restlessness, dullness, confusion of ideas, dizziness, lack of enterprise, noise, all symptoms of general fatigue, headache, etc." "Delicate children are very sensitive in this respect." Great unanimity prevails in answering this question, ninety-four out of ninety-five answering all fatigue symptoms.

Ninth Question: After working in a room where you have grown to be unconscious of distracting noises, are you really more fatigued

than if the noises do not occur? One teacher says: "I am much more fatigued when working with noisy surroundings than when under quiet conditions, though able easily to become absorbed in work and unconscious of noise. There is subconscious fatigue."

Will-power and sense-power are opposed, causing fatigue. Some become accustomed to noise and are disturbed when it ceases. To this question fifty-one answer yes, forty-four answer no.

Tenth Question: In reply to the question, in your past teaching would it have been better if you had sat down more, thirty-eight answer yes, fifty-seven answer no. Some say, yes, during my first year.

Eleventh Question: In reply to the question, did you injure your health by over-fatigue when attending school, forty-four answer yes, forty-three answer no.

Of the forty-four who answer yes, twenty give examinations as the chief cause, and twelve give homework. The other causes assigned are closely related to these, *e.g.*, over-study, long hours, etc. One student says, I had six hours homework every night.

To the question, at what age was this overwork, 1 answers 10 years, 1-11 years, 1-12 years, 1-13 years, 1-14 years, 2-15 years, 6-16 years, 8-17 years, 4-18 years, 3-19 years, 4-20 years, 4-21 years, 2-22 years. The remaining six did not answer definitely.

To the question, how long did these fatigue results remain, a large number answer about three months, five answer one year, five answer two years, seventeen say not yet entirely recovered.

Twelfth Question: To the question, have you had experience in remaining in school during noon intermission, taking cold lunch, and assuming responsibility for order, forty-one teachers answered yes. To the question, what per cent. of your teaching power during the afternoon was lost as the result of this detention, eleven answered more than twenty-five per cent., sixteen answered twenty-five per cent., seven answered twenty per cent., seven less than twenty per cent.

To the question, when pupils have been retained from twelve to one, after a full forenoon of work from nine o'clock, what percentage of an active hour's work was done, the general reply is that in the hour pupils did less than half an hour's work.

A few points may be noted by way of summary.

First. All exercise, physical or psychical, when kept within the limits of normal fatigue, is healthful, and such exercise is necessary to the growth and development of body and mind.

Chaplain Searles, formerly of Auburn State prison, says, "the prime cause of crime is idleness." Satan always finds mischief for idle hands, and it must forever be true that "the rest of the laboring man is sweet," if it be normal rest. There is such a thing as a wholesome, healthful, happifying, normal tire of mind and body, and it is the teacher's duty to feel its thrill from time to time, and to see that pupils are not deprived of a similar pleasure.

There are no doubt, many people in school and out of it who are suffering from a chronic attack of an old-fashioned disease called laziness. Such persons will find much food for honest thought and improvement in an investigation of the advantages of normal fatigue.

Second. Exercise carried beyond the fatigue point interferes with growth, is detrimental to the health of body and mind, and attacks the most sacred citadel of the personality, the moral power to resist temptation. "Tire, and tire, and at it again," when persevered in, may shatter every prospect for this life and perhaps for the life to come.

Signs are not wanting to show that this great law is being ignored. The asylums are being overcrowded. How many there are whose hearts are beating too rapidly, who are working at high pressure, and burning the candle at both ends!

The competition in all walks of life, the worse than slave-driving power of the monopolist, the demands of society and fashion, are hourly consigning their victims to lives of misery.

The disease of Neurasthenia has evidently come to stay. With smaller classes, shorter hours and improved hygienic conditions, the results in schools are more satisfactory than they were, and, in many cases, school authorities are to be congratulated upon what has been accomplished. But there is still need of watchfulness and improvement, even in the best. The fact that nineteen teachers out of fifty say that in three years experience they believe they have injured their health is suggestive. How short the teacher's life in the school-room is! How often a student fresh from the Normal school (holding a certificate of highest grade) enthusiastic, brilliant, full of life and vigor, takes charge of a large city class, teaches conscientiously, and in two or three years becomes so transformed that one can scarcely recognize in the frail, worn out woman of middle age, the bright sparkling girl of three years before. This is a species of slow suicide, and it is too common in our schools. And what about the children? Galton and others have found that most teachers think they have few, if any, cases of over-fatigue in their classes. I

find, however, that to the question, did you suffer from over-fatigue yourself when attending school, fifty per cent. of the teachers answer yes. The ages given are worthy of note. Of thirty-eight who answer yes, there are only five who place the age of injury at under fourteen years. Eight place the age at seventeen. The time when the most mischief is done is when students are preparing for their Departmental certificate examinations. These examinations are usually taken a short time after the period of adolescence, when the vital forces are at low ebb. Dr. Burnham says "an investigation of the subject of fatigue must do something to melt down the molock of examination." It will also do something to emphasize the dangers of excessive homework. The student who reports "six hours homework," also reports "not yet recovered from the effects."

In Collegiate work it is very easy for one specialist master to assign homework in his subjects sufficient for the entire night. It is well for the teacher occasionally to wrestle with the question, what does it profit a student if he pass an examination and lose his health? The proper solution is, not to discard examinations which are necessary, nor homework which is healthful, but to adopt the Aristotelian mean between "no work at all," and "overwork causing excessive fatigue."

The number of hours and distribution of subjects in the school day is too wide a subject for the limits of this paper. The data are still insufficient, but all the conclusions arrived at seem rather to tend to the opinion that the hours should be shorter. For example, Birkenstein concludes that in the seventh year children should have eleven hours sleep and three hours school work.

Fifty-nine teachers out of ninety-four express the opinion that schools opening at 9.00 and closing at 4.00, will do more work with one hour and a half noon intermission than with one hour.

The effects of overwork upon the moral sense is very great. Dr. Baker, of St. Paul's, says, "a tired congregation means an empty contribution box." It would be interesting to know to what extent the decline in church attendance by the "lapsed masses" is due to increased pressure of work, and whether a half-holiday on Saturday afternoon would not improve church attendance.

Children, who are allowed to run the streets at night, quickly run to ruin, partly because they are fatigued after the experiences of the day, and so fall an easy prey to temptation.

There are certain well-established remedies for fatigue. The most effective is sleep. It is doubtful whether one, suffering from exhaustion,

can have too much sleep. Nutrition must also be looked after. There must be just as much nutrition as digestion will stand. Nitrogenous foods are probably not the best in such cases. Someone has said we shall be remembered as a generation of potato-eaters with weak nerves. Energy must be carefully husbanded, and not wasted by undue demonstration.

Every true teacher teaches in such a way as to feel energy go out of him, but he does not teach every lesson in this way, and he must be content to hasten slowly betimes. We sometimes teach so rapidly, and assist so much, that children have not time for individual investigation.

The close relation between physical and mental tire must be kept in view. To quote the words of Paul Pry, "much walking soon tires, and all things grow worse."

The teacher should sit down at times, and it will not be out of place in every training school to study how to teach so as to husband energy.

I remember a teacher who examined papers until midnight, and came to school so nervous and irritable that he was unfit for work. This had gone on for some time, and at length he took the pupils into his confidence, and asked them whether they would rather examine their own papers under his supervision and have him vigorous and good natured, or continue as in the past. The pupils examined their own papers after that.

The element of repose should be cultivated. We all avoid intense people. "He makes me tired," is a slang phrase applied to one whose cadence is too fast or too slow for our nervous system. Let us endeavor to conform to the old motto "when most impressed be most possessed."

We must avoid over-fatigue getting completely fagged out. There must be rest and relaxation.

There must also be outdoor exercise away from school environment. It is found that in resting a muscle occasional stimulus hastens relaxation. The unanimous verdict that remaining at school during noon hour under the strain of responsibility lessons working power at least twenty-five per cent. during the afternoon, is worthy of consideration from the economic as well as from the educational standpoint.

Many teachers have found that difficult cases of discipline have become easy after a brisk walk of half an hour in the open air. A noisy, restless class becomes studious and quiet after a lively recess.

Dr. Arnold was not far astray when he said "I shall stop teaching school when I get too old to go upstairs three steps at a time."

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(*Second Paper—Presented 1897*).

The main purpose of this paper is to give a summary of replies received to a syllabus sent out by the Ontario Education Department at the beginning of the present year. The questions asked were prepared with a view to further investigation along the lines opened up last year. The syllabus was sent only to Public School teachers. Three hundred and seventy-five sets of replies were received. In many cases the teachers of a large school or of a town sent a consensus of their opinions on one paper, thus the answers received represent the opinions of at least five hundred teachers.

Answers in regard to the number of hours spent in sleep, homework, etc., written by pupils themselves were received from over four thousand pupils. The largest number of replies were received from the City of Toronto. My best thanks are due to the teachers who so carefully prepared these answers. My only regret is that under the circumstances I am unable to present many of the papers in full, as they are well worthy of consideration in their original form.

The following is a brief summary of questions and answers:—

#### PART I.

1. What prominent symptoms of fatigue have you noticed in yourself or in your pupils? The answers were similar to those of last year.

Sixty-four per cent. mention restlessness or nervousness; fifty-five per cent. inability to concentrate attention; thirty-three per cent. drowsiness; thirty-two per cent. fullness in brain region or headache; twenty-seven per cent. a tired feeling. Many mention insomnia, talking in sleep, inability to sit erect, irritability of temper, temporary loss of memory, flushed face, etc., as in last year results. One teacher answers, "I always endeavor to notice none in myself and have never had the pleasure of noticing any in my pupils. The pupils of to-day are not given to fatiguing themselves with school work, especially village pupils such as mine."

2. What work can be performed easily when the mind is fresh which is found difficult when the mind is fatigued?

Twice as many answer "thought subjects" as answer "memory subjects."

3. At what time of day is the highest mental activity ?

Ninety per cent. answer some time in the forenoon, the greater number beginning about 10 o'clock.

4. To what extent does change of subject take the place of rest ?

Over ninety per cent. say that proper change of subject is nearly as good as rest until the fatigue point is reached, when mental change will not rest.

5. What results follow from detention at intermission or after school ?

Nearly all agree that detention at intermission is always unsatisfactory, and detention after school usually unsatisfactory. There is no detention in the Toronto schools.

6. How much time should be devoted to intermissions, and how should this time be distributed throughout the day to secure the best results for your class ?

Over fifty per cent. state generally, 10.30 to 10.45 ; 12.00 to 1.30 ; 2.45 to 3.00 ; with longer intermissions for primary pupils.

7. Is resulting mental fatigue greater when pupils are allowed to remain standing during recitation than when allowed to remain sitting ?

Seventy per cent. answer, " Yes," nearly all say that small pupils during brief lessons may stand with advantage, but not in the position of rigid military attention.

8. What fatigue symptoms follow from working in a room at too high a temperature ?

Eighty-five per cent. give symptoms exactly similar to those of fatigue.

9. After working in a room where you have grown to be unconscious of distracting noises, are you really more fatigued than if the noises do not occur ?

Many had difficulty in understanding this question. The object was to test whether inhibited noises exert a fatiguing influence. e.g. A school building is constructed next door to a noisy factory. At first the noise is most distracting. After a few months the teacher is unconscious of the noise unless the factory stops. The question is does it still tire her ?

Of those who answer, eighty per cent. say, " Yes," twenty per cent., " No."

One teacher says, " I have never experienced distracting noises." Another, " I could not live in such a room," " I like a quiet school." Another, " A dead stillness fatigues me."

10. In your past teaching, would it have been better if you had sat down more?

Seventy-three per cent. answer, "Yes."

Many say, "better for me, worse for the children."

11. Did you injure your health by over fatigue when attending school?

Thirty-three per cent. answer, "Yes," sixty-seven per cent. answer, "No."

One staff of teachers answer, "No," "and we did more work and worked harder than the children of these days."

12. Have you had experience in remaining in school during noon intermission, taking cold lunch, and assuming responsibility for order?

Seventy per cent. answer, "Yes."

13. What per cent. of your teaching power during the afternoon was lost as the result of this detention?

The average loss ascribed is  $33\frac{1}{3}$  per cent.

There is considerable difference of opinion. About ten per cent. of the answers say, "No loss or very little." A very few say, "I prefer it to going home and taking hot dinner."

14. When pupils have been detained from twelve to one after a full forenoon of work from nine o'clock, what percentage of an active hour's work was done?

The average answer is forty per cent. The answer is usually qualified by such statement as, "It depends on the stimulus, *e.g.*, if to perform experiments perhaps eighty per cent., if for punishment ten per cent. or less."

## PART II.

1. Is the moral sense weakened as the result of over-fatigue?

(a) Are pupils, when over-fatigued less spontaneous in devising and executing moral acts, *e.g.*, are they less active in thinking out methods for helping other people and in rendering assistance to others?

Ninety-three per cent. answer, "Yes."

One answers "Yes, with the exception of the angelic few."

(b) Are they neglectful of moral acts which have become habitual to them, *e.g.*, are they less polite than usual?

Eighty-four per cent. answer, "Yes."

One teacher says, "when pupils are not weary, and I accidentally drop an article before the class, *e.g.*, a lead pencil, a number of pupils

start at once to hand it me. When they are very tired I notice they are very slow in starting, and perhaps do not start at all."

(c) Are they less liable to resist temptation, *e.g.*, are they more easily irritated than usual?

Ninety-five per cent. answer, "Yes."

(d) Are they more spontaneous in devising and executing immoral acts, *e.g.*, injuring others?

Sixty-five per cent. answer, "Yes."

One teacher says, "I asked my pupils and they all answered 'Yes.'" Some gave examples of disorder due to over-fatigue.

Many say, "when they are idle, not when fatigued." There is considerable difference of opinion in regard to this question.

Many hold that when over-fatigued the executive powers for good and bad are weakened, others say that the irritation of over-fatigue is apt to vent its spleen, on something tangible.

2. Does development of moral power increase ability to resist fatigue, *e.g.*, can a pupil who has overcome bad habits, such as lying, swearing, stealing, etc., do more and better work in arithmetic in a given time than he could have done had he not reformed?

Ninety per cent. answer, "Yes."

Many say, "self-control in character forming gives self-control in concentration."

One says, "Developing will power or moral power does not develop reasoning power."

3. At what age do you find boys and girls respectively, most susceptible to fatigue in school work?

Sixty per cent. answer period of adolescence or about it.

Thirty per cent. answer from five to seven years.

One teacher answers, "girls most susceptible to fatigue, twelve to fifteen, boys always."

4. Are pupils more susceptible to fatigue when growing rapidly than they are at other periods?

Seventy per cent. answer, "Yes." No experiments recorded in answer to this question.

5. How many hours per day do your pupils spend in school work in the school-room (not including gymnastics)? (If a difference is made for primary pupils please arrange as follows: five years of age, six years of age, etc., also arrange answers to question six, in a similar manner, according to age).

The answers were mainly in accord with the prescribed depart-

mental time table, except that Primary pupils are dismissed earlier. In some cities differences are made, for example, in Hamilton school hours are 9.00 to 12.00, and 2.00 to 4.00.

6. How many hours per day, outside the school-room, do these pupils spend in (a) Sleep; (b) Home study of lessons; (c) General reading?

The following is a rough summary:

| <i>Age of Pupil,<br/>Years.</i> | <i>Sleep,<br/>Hours.</i> | <i>Home Work,<br/>Minutes.</i> | <i>General Reading,<br/>Minutes.</i> |
|---------------------------------|--------------------------|--------------------------------|--------------------------------------|
| 5 and 6                         | 10.75                    | ....                           | ..                                   |
| 7 and 8                         | 10.25                    | 15 to 30                       | 30                                   |
| 9 and 10                        | 9.85                     | 20 to 60                       | 60                                   |
| 11 and 12                       | 9.25                     | 40 to 60                       | 70                                   |
| 13 and 14                       | 9.00                     | 45 to 90                       | 70                                   |

One school reports an interesting point, those who sleep least are mostly undersized.

It is difficult to give any concise summary of homework returns. Teachers and pupils differ widely in opinion. The teachers average of homework is nearly always less than that stated by pupils, usually not more than one-half. Some teachers write, "I have looked over my pupils' papers. I am sure they do not spend so much time as recorded on homework."

7. What disastrous results (if any), have followed from overwork in preparing for or writing on examinations?

Thirty per cent. answer, "No disastrous results."

Fifty per cent. emphasize, "Ill health in various forms."

Sixteen per cent., "Failure on examination."

Seven per cent., "Dislike for study."

One answers, "Disastrous results follow from the reverse of over-work."

8. What precaution would you suggest to prevent over-fatigue in the school-room?

9. What remedies do you consider the best in cases of over-fatigue?

I have summarized the answers received under suggestions for prevention and cure of over-fatigue.

(a) In the Teacher:

Fifty per cent. emphasize, "Rest and sleep."

Forty-five per cent. emphasize, "Variation of work."

Thirty-eight per cent. emphasize, "Outdoor exercise."

Twenty-two per cent. emphasize, "Study of health."

Twenty-six per cent. emphasize, "Avoidance of worry."

*(b) In the Pupil:*

Sixty per cent. emphasize, "Recreation, songs, etc."

Fifty per cent. emphasize, "Pure air."

Forty-five per cent. emphasize, "Change of subject."

Forty-six per cent. emphasize, "Manual training, physical exercise."

Thirty-eight per cent. emphasize, "Proper temperature."

Forty per cent. emphasize, "Avoid worry from examinations and homework."

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*PRACTICE TEACHING IN TRAINING SCHOOLS.*

A. MCINTOSH, TORONTO.

In dealing with this subject, it is not my intention to criticise existing institutions, nor to propose radical changes, which might be considered good in theory but inoperative in practice; it is rather to offer some suggestions and observations, tending towards perfecting in detail the working of the machinery already provided. Any reference, therefore, that may be made, in this paper, to the present training schools, will be for purposes of illustration and not of criticism.

The names—practice school and model school have, perhaps, been given for want of a better name than either. The former, no doubt, suggests the erroneous idea that it is a school where students may learn to teach by teaching; and the latter, the equally erroneous notion, that the art of teaching is to be learned by imitation. By whichever name it is known, whether practice school or model school, it should be mainly a school for *observation*, where students will have an opportunity of observing the best results of the teaching art, in organization, discipline, and methods of instruction. That a practice school is an important department of a training school, need not be contended, as it is now generally admitted that such a school is not only important, but absolutely necessary for intelligent instruction in methods, school organization and management. The presence of a practice school does not imply that scientific instruction in method is to be dispensed with. On the contrary, it pre-supposes that such instruction is being given and that the practical lessons are specially intended as illustrations of the principles set forth. The foundation of all true instruction in methods is in the study of Psychology; but, in order to impress fully the meaning and application of any principle, concrete examples are required. Instruction in method comes naturally under the following heads: (1) *theory*, (2) *observation*, (3) *application*. Observation lessons should come early in the term, but should be preceded by such instruction as will enable the students to understand their aim and to draw accurate conclusions as to results attained.

When students are asked to observe a lesson by an experienced teacher, they should not be left in doubt as to their duty. From the

experience of the past, and perhaps, also from what has been written on the subject, a student may be inclined to conclude that his duty is to see how a certain subject is presented by a particular teacher and then to proceed to do likewise at the first opportunity. At the very outset, definite instruction must be given the students, so that they will not misunderstand nor misapply these special observation lessons. These lessons are intended as subjects for examination and critical study and not, in any sense, as models for mere imitation. The time spent by students in the practice school would be worse than wasted, if they were even permitted to act on the assumption that conscious imitation in teaching is either the duty or the privilege of any one preparing for the work of the class-room. Even, if it were possible to present absolutely perfect model lessons, it would still be a most degrading thing to reduce the student to the level of a mere imitator. The great danger lies in this, that in all imitative work, there is always an appearance of progress, when, in reality, there may be none; and what is much worse, the student may be switched on the side track which leads down to the low level of mediocrity. Besides, the very first principles of education would be violated by admitting conscious imitation as a means of training teachers.

Soon after an observation lesson has been given (and the sooner the better), it should be discussed with the students, to learn what they have observed and what meaning they attach to what was done. They should be required to write out a complete analysis of the lesson. This should include the plan and such comments as will indicate the principles involved. But, in conducting this exercise, care must be taken not to allow the discussion to descend into carping criticism. In all critical study of teaching, much more good can be accomplished by emphasizing the good points in a lesson than by dwelling on defects. The impression must not be left by these discussions, that the teacher is merely endeavoring to illustrate a certain prescribed method, which should always be followed in presenting the same subject. On the contrary, the students should be made to fully realize that complete naturalness on the part of a teacher is indispensable to the highest success. Observation lessons should illustrate and suggest methods but never prescribe them.

It is of prime importance that the practice school should be placed in as high a state of efficiency as is possible under the circumstances to make it. The building should be thoroughly modern in all its appointments, and equipped with modern furniture, apparatus, books of reference, etc. Above all, the staff of teachers should be the very

best available. In selecting teachers, the greatest care must be exercised to appoint only those capable of rendering efficient service. This applies equally to all the classes. In so far as illustration work is concerned, one class is quite as important as another. It is just as necessary to have good teaching done in a low class as in a higher, and the salaries should be so arranged that the teachers of junior classes will not have any financial reasons for desiring a change to a higher grade. Teachers should be assigned to the grade of work best suited to their natural aptitudes and special attainments.

It need not be affirmed that a practice school must be progressive; that may be taken for granted. In fact it is necessary for the usefulness of the institution. Everything new in theory or practice should be carefully examined by the teacher; but this is quite another thing from at once adopting every new fad proposed by either crank or humbug. There is no more certain sign of abject weakness and incapacity in an educationist, than to find him adopting the methods of patent medicine venders in endeavoring to keep his name before the public in connection with some supposed educational discovery. A mere artifice is often magnified into a method and set forth as a complete means of overcoming all the difficulties of school work. The principle involved in the device may be correct in itself; but, misapplied, being made to do duty far beyond its range of application. It should be the direct aim of all training schools to avoid fads, in order that all subjects may receive their due proportion of attention. The faddist is a dangerous guide, because of the very interest which he takes in his hobby. No doubt many things done by faddists are well done, and results attained of astonishing progress in certain branches, and yet these results are by no means commendable, because they are accomplished at the expense of other and even more important subjects. It is much safer to aim, in all elementary work at least, at a high average over all subjects, than to endeavor to secure excellence in one or two subjects and neglect others. In the matter, then, of preserving the balance of subjects, the practice department of a training school must set the example. Every principal of a Collegiate Institute knows well how important it is to maintain the proper balance of subjects, and how difficult it is to secure this, especially when either over-enthusiastic or selfish specialists have charge of the different departments.

After the series of observation lessons has been completed, which should embrace as much variety, within the prescribed limits as possible, in the subjects of lessons and in the grade of class, lessons

should be assigned to the students. These must be in the direct line of the regular class work; review lessons should not, as a rule be given, as they might require more knowledge of the work of the school than could reasonably be expected from students at the early part of the term when such lessons must necessarily commence. In regard to the amount of practice which it is advisable to attempt, the circumstances of the particular school and the number of students must determine. Probably in some of the County Model Schools, where the Public School is large and the number of students in training is comparatively small, the maximum amount of practice can be attempted. But it is not a case in which quantity will prove the measure of the usefulness of the experience. It is rather, what use is made of the student's teaching that will determine the real value. It is quite probable that practice, without proper supervision, will do harm instead of good to those most interested. Anything that might tend to lower the importance of the work, either in the eyes of the students or in those of the pupils, must necessarily be a drawback to the cause of sound teaching. Practice without direct supervision will come soon enough, when the students take charge of their own schools. Besides the students, the pupils must have their due share of consideration—they must be held as a sacred charge. Even for the students themselves, it is much better to have a limited amount of practice in a school of high standing, than to do a large amount of teaching in classes below the line. Any tendency to consider the pupils of secondary importance would seriously impair the usefulness of any voluntary practice school in the Province.

A Model School cannot be used as a practice school to test directly the student's disciplinary powers, without impairing its usefulness as a school for observation, which is in reality its chief function. A student's power to control pupils must be inferred and not measured by a test which would, in the very nature of things, tend to lower the tone of the school. If the sessions of all the training schools were made one year, as has been proposed, and if admission to everyone were based on the non-professional standing alone, then only interim certificates should be granted at the close of the session, and, after the student has had one year's experience in teaching, which has been approved of by the inspector, extended certificates in the case of Thirds and permanent certificates in all the higher grades, could be awarded. This course would largely overcome the difficulty so often complained of, without the necessity for attempting to do two inharmonious things at the same time, viz.: to keep the school up

to a standard, suitable for illustrative purposes, and at the same time, to expose it to all the drawbacks incident to placing the classes under the control of experimenters. Now, this is not intended as any reflection on students. The disconnected efforts of a large number of teachers of the highest ability and widest experience would injure the standing of any school. A very practical argument against making the attempt to test the power to control, is found in the experience of certain American Normal Schools. Wherever the students have been placed in full charge of the classes, the practice schools have become utterly valueless for illustrative purposes.

When a lesson has been assigned to a student, it is a fatal mistake to give direct help to him in constructing the plan of the lesson or in working out the details of the method to be employed. This must be done by the student for himself, if he is to derive any benefit from the experience. To assist him in this would rob his teaching of that naturalness which is necessary for success. It would make him dependent and would lead to routine teaching, including all the evils of learning to teach by imitation ; in fact, it would be imitation in disguise. Besides, the criticism of the lesson would be valueless, as it would be a review of the misapplied work of the instructor in methods, and not that of the student who is held responsible. There may not always be found available means of preventing students from assisting one another in the preparation of their lessons ; but much can be done by holding students strictly responsible for the construction work which they present in their lesson plans and illustrate in their teaching, and by discountenancing the giving of any direct aid in this department of their work. As a matter of course, the instructors in methods will have discussed fully the construction of lesson plans, including the distinctions between *matter* and *method*, *facts* and *illustrations*, *introduction* and *lesson proper*, *telling* and *developing*, etc., and the observation lessons will have illustrated all these main distinctions, before the students are called upon to prepare lessons. This will be found a valuable expedient to assign the same lesson to all the students of a section and not name the one who is to teach, till the lesson is about to commence. Then all will be in a position to observe and discuss the lesson more intelligently than they could possibly be without preparatory study.

As soon after lessons have been taught by students, as is at all possible, they should be followed by criticism. This is perhaps the most delicate and at the same time one of the most important duties

assigned to a teacher in a practice school. In conducting this exercise, the following aims should always be kept clearly in view :—

- (1). To emphasize the good elements of the lesson.
- (2). To offer such suggestions as the circumstances may afford.
- (3). To criticise defects.

The first step is to consider the impressions which the students, who observed the lessons, have received. They should be encouraged to state their opinions freely. They should be definitely told that anything they may say by way of criticism will not, in the slightest degree injuriously affect the standing of the student teacher. The regular teacher should value the lesson before taking up the criticism. The students who are not engaged in teaching may be required to present notes of the lessons on special forms supplied them for the purpose. Care must be taken to impress and emphasize all that is valuable in the lessons. Probably the most difficult case to deal with is that with negative qualities—little to mark it in any way ; the matter is accurate, and method conforms to the usual practice, and yet the lesson is almost valueless. This state of affairs is due to a natural lack of teaching power. There is little or no difficulty in well defined cases ; but in dealing with mediocrity, where the opinion, or judgment, apart from direct evidence of teaching ability, must be exercised, in order that no injustice may be done to those possessing latent power ; but in adopting this course, it is quite probable that many are qualified legally who should never be placed in charge of a school.

In order that there may be system in conducting the criticism, it is necessary that some definite plan be adopted. The following divisions are suggested :—

1. *Matter*.—Whether sufficiently prepared by the student ; suited to the class of pupils, both as regards kind and quantity.
2. *Method*.—Whether the student has observed the distinction between what should be developed and what should be told ; the nature of the illustrations used ; the appropriateness of the questions, their distribution and form ; the use made of the black-board ; the nature and extent of the drill given ; the summary, or review of the lesson, if any ; the use made of pupils' questions ; the correction of errors, etc.

3. *Manner and Management*.—Power of enlisting the sympathies of pupils and of swaying the class ; whether bright and active, bustling and excited, or dull, gloomy, reserved, listless, indifferent ; whether the interest of the pupils has been aroused and their co-

operation secured ; accuracy and appropriateness of the language employed ; peculiarities, whether the result of excitement or habit.

*Results.*—Whether the lesson tended to impress the new facts clearly ; the extent to which the mental faculties of the pupils have been aroused ; the real value, if any, of the lesson to the pupils.

In conclusion, it may be stated that the complete training of a teacher involves, (1) a thorough knowledge of the subjects of instruction, especially language, geography and history, mathematics and science ; (2) a knowledge of psychology, on which is based the science of education ; (3) a knowledge of the aims, successes and failures of the great educational reformers ; (4) a knowledge of rational methods, which is based on the science of education ; (5) the formation of a high ideal ; (6) unremitting study and rational application of principles from the first. The school for practice should contribute largely to the fourth and fifth elements in this plan of training, viz., methods of instruction and the formation of a high ideal ; and in order that this may, in the highest possible degree, be accomplished, its main purpose should be clearly recognized. This main purpose is the illustration of principles and methods. Therefore, a Practice School or Model School might, more aptly, be described as a *School for Observation*. The true sphere of action for a School of Observation, is in neutral ground between the science and art of teaching, to assist as far as possible in maintaining a proper balance, to prevent either form gaining the mastery over the teacher, and to show that pedantry in either psychology or methodology tends to lower a teacher's usefulness, even in the face of high sounding pretensions. It must ever be borne in mind that no other element in the whole range of a teacher's accomplishments can compare with a genuine interest in the subjects of study and a living sympathy with the minds of his pupils, in raising him above the level of mediocrity.

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*FEELING AS A FACTOR IN EDUCATION.*

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The tripartite division of the mind, intellect, feeling, and will, which was first propounded something more than a century ago, is now, one may say, universally accepted by psychologists. The terms cognition, sensibility, and choice are also used to express the same facts. Moreover, the word faculties is often applied to these fundamental or primary facts, as well as to the subordinate divisions of the intellect; but those who use it for either purpose should take care least they mislead others, if not themselves. Intellect, feeling, and will are not organs or parts of the mind, as the fingers and toes, eyes and ears, are organs or parts of the body; they are simply the forms that mental action or manifestation assumes, or the different elements or phases of consciousness. Certain relations existing among these elements should be briefly stated.

1. The three faculties, so-called, are never found separate and apart, but always together. A man does not now *know*, then *feel*, and afterwards *choose*, but knows, feels, and chooses all at the same time. In a word, intellect, feeling, and will are the inseparable phases or elements of every fully developed psychic state. They are found in every complete consciousness. Under this aspect they have been compared to respiration, circulation, and nutrition, which go on simultaneously in the human body.

2. Still every distinct state of consciousness must have a point of beginning, and that is always an act of cognition or knowledge. A man's sensibility is not stirred by an object that he has not yet known, nor can he choose an object that has not yet appealed to him as a possible object of choice. A boy enters the room where I am sitting with an object in his hand which I recognize, that is, know as a telegram, and with this act of recognition, the whole train of mental action is set in motion.

3. The three psychic factors are not equally prominent in every state of consciousness; perhaps they are not equally prominent in any such state. Thus we are able to classify states of mind as intellectual, emotional, and practical; but we never mean by these expressions that only intelligence, emotion, or will is present in such state. The

fact is, they are all present, and that here, as elsewhere, we classify objects of study with reference to what gives them their character.

4. We classify men and subjects in the same way. When we say that such a man is intellectual or practical, we do not mean that he possesses this faculty only, but that it determines the character of his mind. Thus, a philosopher is marked by thought, an artist by sensibility, a man of affairs by will. And yet the philosopher has both feeling and will; the poet, both intellect and will; the man of affairs, both intellect and feeling. Manifestly, it is the practical activity of the mind that gives the man of affairs his character. Look at a picture of Bismarck, the man of blood and iron; he looks as though he were made of frozen purpose or solidified resolution.

5. Sometimes intellect, feeling, and will tend to vary directly, sometimes to vary inversely. Within limits, the more knowledge the more feeling, and *vice versa*; beyond those limits, the more of one the less of the other. When I recognize the telegram in the boy's hand, my curiosity is awakened; I decide at once to take, open, and read it; thus I learn more and feel more, and possibly determine upon some course of practical action: and so on until the series is fully worked out, or the resulting state of consciousness is completed. Still it must be remembered that the energy of which the mind is capable at any given time is limited, and that, when this energy is all called out, the more of it that is absorbed by one kind of activity, the less there remains to take other forms. No man can think, feel, and act with the highest degree of energy all at the same time. A student does not feel deeply when he is putting forth all his power, as we say, to solve a mathematical problem. A girl is not likely to think clearly when she has just heard of the death of her mother. Nor can a general find time or talent to devote to philosophical speculation, or to indulge in feeling (even of regret for the killed and wounded that lie about him) on the battle-field. And yet, every one of the three elements implies the presence of the others; while the three vary continually they can never be separated.

6. The relative strength of the three factors of mental activity varies with the age of the individual. Feeling is strongly developed in the child, while the judgment and will are weak. In the well-developed life of the adult, feeling, in large measure, has been brought under control, while the logical faculties and the will have become strong.

These elementary psychological facts could be stated much more elaborately and be illustrated at almost any length. It is hoped, however, that they have been made plain. Certainly they are facts that

every practical teacher should by all means strongly grasp. Some of the more important applications of these facts to the rearing of children, and especially to teaching, may well engage our attention.

1. The mental atmosphere of the school-room is a subject of very great interest, and suggests to the teacher practical problems of no little difficulty. Attention is now directed, however, to the amount of feeling, and the kind of feeling, that may safely pervade this atmosphere. If the feeling of the pupil runs in the minor key, he will accomplish little in the way of study or learning. Then if his feeling is of the opposite character, and is particularly strong, he will accomplish little if anything more. The mental attitude of the pupil to his work must also be considered. Nothing is more deadening and fatal to a school than the feeling, on the part of the pupils, that there is little to be done, or that, if there is much to be done, they cannot do it, and that it makes no great difference anyway. The atmosphere of the school should be charged, on the other hand, with courage, hopefulness, interest. The pupils should believe in their teachers and in themselves. They should think that there is much to be done, and that they can do it, or at least some reasonable part of it. To be sure, the school atmosphere may be over-charged with these elements. The teacher may appreciate and praise pupils excessively, and thus give them false ideas of themselves and of their relations to the world; and against this practice there are most decisive intellectual as well as moral reasons. A gentle ripple of warm, equable feeling should be kept playing through the school-room. Let the teacher, then, give good heed to the emotional climate of the school.

2. Children's intellects will not work with vigor when they are excited by strong feeling, no matter what the character of the feeling may be, whether of pleasure or of pain. If they are unduly excited, or unduly depressed, they cannot really study, and so cannot really learn. The wheels of the mind, so to speak, will not revolve freely in a stream of violent or turbid feeling. They must run free and clear, or they will not keep the machine in vigorous motion. For example, a pupil who is full of rage, deeply mortified, consumed by envy or jealousy, or is strongly expectant of something that lies outside of his school work, will accomplish little or nothing so long as he remains in this condition. Nor is this all; a single pupil in a state of violent excitement will communicate his own feeling to the school of which he is a member, and thereby interfere most seriously with its proper work. Accordingly, thunder-gusts and cyclones of excitement or passion in the school-house or school-yard sky are strongly to

be deprecated. Every experienced teacher knows that indulgence in a paroxysm of emotion by a single pupil at the opening of the school in the morning, will leave its effects for hours, not merely in the single pupil, but in the teacher and in the school as well. If teachers were always free to do what was best, they would often consult the good of individual pupils, and of the whole school, if they sent pupils who were wrought up to a high degree of mental excitement out of the school until their excitement had subsided. Feeling is communicated from mind to mind even more rapidly and more completely than intelligence.

3. Another thing to look to is the relations that exist between pupils and their teacher. If it be true, that to secure freedom from undue disturbance of the sensibility, is one of the constant tasks of the teacher of the well-regulated school, what shall be said of a school in which the teacher herself is a constant source of such disturbance? Not unfrequently this is precisely the case. Even in schools of high rank it is desirable that students should be on good terms with their teachers. The emotional factor is of much importance in high schools, and of considerable importance in colleges. But in the grades, and particularly the early ones, still more stress must be laid upon this relation. College students have some power of discrimination, and some control over their feelings. They may take "Old Crusty's" work, even if they do not like him, and get much good out of it, because he understands his subject and is a good teacher. But young pupils are incapable of any such discrimination or self-control. To do their best work they must *like* their teacher. A child is governed by his feelings almost wholly, and a teacher whom he does not like, or at least strongly dislikes, no matter how accomplished that teacher may be, is necessarily a bad teacher for him. Accordingly, if a teacher, after a fair trial, cannot adjust herself to a school, or the school to herself—or, in a word, if she cannot bring about a good state of feeling—then the relation should be severed, and the sooner the better. This teacher may succeed admirably in another school; she may not be to blame for the state of things existing in this one; but this makes no difference—for the time she is out of place.

An excess of feeling, interfering with the operations of the intellectual faculties, is often mistaken for an excess of will, or stubbornness. This mistake, which is a very harmful one, is well shown in the following extract from Dr. Carpenter's "Mental Physiology":

"Those 'strong-minded' teachers who object to these modes of

making things pleasant,' as an unworthy and undesirable 'weakness,' are ignorant that at this stage of the child-mind the will—that is, the power of self-control—is weak; and that the primary object of education is to encourage and strengthen, not to repress, that power. Great mistakes are often made by parents and teachers, who, being ignorant of this fundamental fact of child-nature, treat as willfulness what is in reality just the contrary of will-fulness; being the direct result of the want of volitional control over the automatic activity of the brain. To punish a child for the want of obedience which it has not the power to render, is to inflict an injury which may almost be said to be irreparable. For nothing tends so much to prevent the healthful development of the moral sense, as the infliction of punishment which the child feels to be unjust; and nothing retards the acquirement of the power of directing the intellectual processes so much as the emotional disturbance which the feeling of injustice provokes. Hence the determination often expressed to 'break the will' of an obstinate child by punishment, is almost certain to strengthen these reactionary influences. Many a child is put into 'durance vile' for not learning the 'little busy bee,' who simply cannot give its small mind to the task, whilst disturbed by stern commands and threats of yet severer punishment for a disobedience it cannot help; when a suggestion kindly and skilfully adapted to its automatic nature, by directing the turbid current of thought and feeling into a smoother channel, and guiding the activity which it does not attempt to oppose, shall bring about the desired result, to the surprise alike of the baffled teacher, the passionate pupil, and the perplexed bystanders."

Only intellectual results of the emotional factor in education have been dwelt upon. As much, or even more, may be said of moral results. Great positive evils, are engendered in children by the unfortunate relations that exist between them and those under whose oversight they are placed. Some teachers excite children, or particular children, morally, as other teachers excite them nervously, in the wrong direction. Children sometimes say, "I can't be quiet in that school." The teacher strokes them the wrong way. It is equally true that children can't be good in *that* school. Moreover, much the same that has been said of the teacher may be said of the nurse. Incalculable moral harm has been done to sensitive children by putting them, and keeping them, in the care of nurses and teachers whom they did not like and for whom they felt an aversion. Children may be greatly harmed or wholly ruined by paying too much attention to

their notions, whims, and caprices; but that is no reason for refusing to consult to a reasonable degree their likes and dislikes in relation to those who have the oversight of them.

Hitherto the school has existed primarily for an intellectual purpose. Its great function has been to train the intellectual faculties. The feelings and the will have always been secondary. And this state of things, there is good reason to think, will always continue. It is difficult to imagine a system of education as existing primarily for the sake of the sensibilities and wills of students. Still it is a fair question whether the other primary faculties of the mind have received, or are receiving, as much attention in schools as is desirable. One thing, at least, must be borne in mind. This is the fact that the sensibility and the will cannot be directly approached by the teacher, as the intellect can be, but must rather be approached indirectly. The individual does not consciously allow his feelings and his will to be unduly interfered with. The wise preacher who desires to rouse his congregation to love and good works, does not say to them, "Now I am going to make you feel as you know you ought to feel," or "now I am going to constrain you to do what you know you ought to do;" but he puts before them subject-matter chosen with reference to the effect that it will produce upon their minds, and thus accomplishes the end before him.

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*ATTENTION.*

J. SUDDABY, BERLIN, ONT.

I suppose there is not much difference of opinion as to the aim of a course in the science of education. In the first place, I think we should try to give the students correct notions of the nature of the mental powers, as attention, memory, imagination, conception, etc. This knowledge should consist not only of the facts upon which the definitions are founded, but the important laws governing the activity and development of these powers.

In the second place we should show how these truths are applied in the work of teaching.

In other words we should give a course of instruction in pure psychology, followed by a course in applied psychology.

As the nature of the matter to be covered by a course in the science of education is thus fixed, why speak of the science of education for any particular kind of schools—for county model schools for instance? The question is forced upon us by the smallness of the amount of time at our disposal. We cannot change the nature of the subject, but we can limit the amount of matter brought forward.

Under the peculiar circumstances under which we are laboring, we should aim at giving the students a firm grasp of the fundamental facts *only*, leaving all the rest to the more extended course covered by the normal schools and the normal college.

Perhaps the best method of occupying the few minutes at my disposal would be to single out some one of the mental powers by way of illustration. Let us take Attention.

Definition (1). While sitting here some good singer in the next room starts Annie Laurie. We turn our mental activities upon the song, and continue to hold them there to the end. This concentration of the activities upon the presentation is called Attention.

(2). In taking a walk we perceive a beautiful flower. The bright colors stir the feelings of interest, so the mental activities are turned upon it without conscious effort, and may be held upon the flower for some time. This Attention.

(3). Our house takes fire and burns to the ground. As we see the flames destroying our piano or library the feeling of pain is intense,

yet our mental activities are rivetted upon the spectacle. This Attention.

(4). We dislike factoring in algebra. As we see others engaged in it the work seems repulsive. We know, however, it is necessary for matriculation. So when the mind places before itself the ideal of itself as having power to factor, the desire to realize this ideal springs up. Roused by this feeling or desire the mind consciously puts forth the necessary effort—that is to say, turns its activities upon the factoring.

Causes of attention.—In the case of Annie Laurie and that of the flower, the cause of attention is evidently the *feeling* of delight induced by the presentation itself, the inherent charm of the object. In the case of the burning house it is feeling also, but this time the *feeling* or *interest* is one of pain.

Now in the case of the factoring it seems to be quite different—the attention being the immediate outcome of a mental exertion, resolution or will. But what aroused the will? The *feeling* of desire. Hence we find that all attention is caused by *feeling*.

Definition.—Attention is that state of the self caused by feeling in which the mental activities are concentrated upon some presentation.

Kinds.—Now when the attention is the outcome of the feeling or charm caused by the object itself—without any assistance of the will—it is called non-voluntary attention. When the attention is wholly or partly the outcome of a mental resolution or will it is called voluntary attention.

#### CONDITIONS OF NON-VOLUNTARY ATTENTION.

We have seen that non-voluntary attention depends upon feelings aroused by the presentation itself. What feelings are available for our purpose? By carefully observing young children, and by reflecting upon the feelings the following have been discovered:

(1). *Feeling of Contrast*.—(a) Little child in cradle in the gloaming. Light brought into the room. The eyes of the child follows it about the room. Sudden contrast to the gloom. Attention.

(b) Everything still in the evening, in the country, gun fired—sudden contrast. Attention.

(c) Lady with black silk dress—wears white shawl. Attention.

*Practical Application*.—(I.) The barren soil of the Laurentian region contrasted with that of the other parts of Canada.

(II.) Sharp contrasts between historical characters and events. Hampden and Strafford.

(III.) Antithesis in rhetoric depends for its value upon its power to secure attention. The free use of this in the teacher's language! "For fools rush in where angels fear to tread."

(2). *Novelty*.—This means opposite to what is familiar. (a) Having a jar of carbonic acid gas, let children see that a lighted candle goes out in it. Closest attention, why? Because this seems opposed to ordinary or common experience—Novelty has secured attention.

(b) After soaking a thread in salt-water and then drying it, attach to it a small ring. Holding it suspended in the air, set fire to the thread and let the pupils see it burning while the ring remains in the air apparently without support. Attention the result.

*Practical Application of the Law*.—This law strikes a death-blow at monotony—in *voice*, in *method*, and in *matter*. It calls for VARIETY.

(I.) Teacher's voice should vary in *tone*, in *pitch*, according to the nature of the thoughts to be expressed, and should be marked with the proper emphasis and inflection.

(II.) In teaching the structure of a sentence—*analysis* then *synthesis*.

(III.) In a map first you name, and pupils point out, then you point out, pupils name, etc., etc.

(3). *Intensity*.—(a) If two lights are brought into the room the child's eye will follow the brighter and more intense.

(b) Other things being equal, a loud sound is more apt to direct attention than one not so loud.

(c) Bright scarlet than neutral gray.

(d) To see a dentist extracting teeth affects one more strongly than to think of the same—because the experience of seeing is more intense than mere reflection.

*Practical Application*.—Teacher's manner and voice should carry to the hearts of the pupils that he is intensely interested.

*Flash of Identity in the Midst of Diversity*.—Every step in intellectual work is accompanied by a feeling of *illumination*, *expansion*, and *power*, which has been called "The flash of identity in the midst of diversity." Now this feeling, when experienced, secures attention for the next step.

*Practical Application*.—The lesson ought to be conducted in such a manner as to let the pupils feel this to its fullest extent. (This was illustrated by speaker).

## CONDITIONS OF VOLUNTARY ATTENTION.

(1). *Precise view of Work done by the Will in Attention.*—We have already said that voluntary attention is that which arises either wholly, or partly from an act of will. Let us now enquire what the will really does—what part it really plays.

Going back to our former illustration, that of factoring—the work presents no charms; is repulsive; yet by an act of will we turn our attention upon it. Can you keep it there if none of the charms upon which *non-voluntary* attention depends unfold themselves? Suppose no thrill of feeling from CONTRAST, from NOVELTY, from INTENSITY, from the discovery of identity in the midst of diversity, etc. Impossible. You would be in the same mental attitude as would be a class of little ones from the Kindergarten trying to learn mental science or Euclid.

Having secured their attention by arousing their will, you proceed : “ My dear children.” (The mind tends to act again in a manner similar to that in which it has acted before). (Feelings tend to propagate themselves). (In induction the mind proceeds from particular facts to general facts—but in deduction we assume the general, and make use of this to throw light upon the particular.)

We perceive then that we cannot count upon the sheer effort of will to *hold* attention. The true office of the will is to introduce mind and matter. The continuance of attention must result from the inherent charms which the subject has for the mind. It continues to assist those charms however.

*Illustration.*—At a social gathering Miss Jones says to Miss White, “ Well you permit me to introduce to you Mr. Lofty ? ”

“ What, that awkward looking man near the piano ? ”

“ Yes.”

“ No, I do not see anything attractive about him—he is rather repulsive than otherwise.”

“ Well it can do no harm to permit an introduction. You need not converse with him five minutes if you find him as uninteresting as you imagine him to be.”

“ O, well, to please you, I submit.”

Now, if Mr. Lofty exhibits no interesting qualities, his case is hopeless. But he may do so: Miss White may find that though ungainly in appearance, he is manly and sincere. That though he may not be a great talker, the ideas advanced are original. She may find, as

acquaintance ripens, greater and greater charms develop themselves. Result, Miss White becomes Mrs. Lofty.

Now, Miss Jones in this affair performs the office of the will in attention. She brought about an introduction, thus giving Mr. Lofty's interesting qualities an opportunity to assert their power.

*Remark.*—Besides this work of introduction, the will assists the inherent charms to hold the attention—to prevent drifting. What is called voluntary attention = will + non-voluntary attention.

*Importance of the Will in Attention.*—We have now seen that the office of the will in attention is to introduce mind and matter, and to aid in keeping the mind from drifting. It must not be supposed, however, that this belittles the importance of the *will* in attention. On the contrary, it is the will that infuses iron into attention. Were it not for this, no difficulty of any consequence would ever be mastered. The mind would not adjust itself to any matter which was not very attractive and easy. In its workings it would, on feeling the shock of difficulty, drift away to what was delightful.

What then have we to depend upon to arouse *will*?

*What the Teacher can do.*—We have now seen the work effected by an act of will, but the question before the teacher is, "What can I do to arouse will?"

In order to answer this question we must notice the elements of will. The mind holds before itself an ideal self, and the act of will is simply an effort of the actual self to reach this ideal. Furthermore, the effort of the actual self to reach this goal, can only be brought about by DESIRE. Thus:



Now the teacher can aid the pupil to get before himself the ideal self. He can, in other words, bring before the pupils the ends to be reached. Then he can do VERY MUCH to strengthen desire, which is the cause of the effort to reach the ideal—which effort we call will.

*Illustration.*—Suppose we wish to get the pupil to apply himself to getting a knowledge of arithmetic. We may bring the matter before the pupil and try to get him to form the ideal of himself as possessing a knowledge of the subject. And as knowledge is the food of the mind we may assume that there is *some* desire to reach the ideal though it may be only germinal in some pupils.

Now, by pointing out to the pupils the advantages of knowing arithmetic, not only in aiding them to gain a position in life, but also in imparting power to their minds, the desire to reach the ideal will be greatly strengthened. Disparagement of the pupil's actual state will, of course, have the same effect.

If, then, the will is to be aroused, the impulse or desire to reach the ideal self (self-knowing arithmetic), must be strengthened to a degree sufficient for the purpose. We also see that ONE way of strengthening this desire is to appeal to the prudential motives. Just in proportion as we can make the ideal self appear WORTH the effort—just in proportion as we can make the pupils painfully feel the gap between the dark, ignorant, actual self, and the glorious ideal self—will the desire to reach the ideal self be strengthened, and, of course, the chance of arousing the will increased.

After the application of the brightening process to the ideal self, the matter may be thus represented :



But have any other mental laws been discovered, capable of throwing light upon the momentous question of arousing the will.

These :

- (1) Feelings tend to propagate themselves.
- (2) Feelings are transferable.

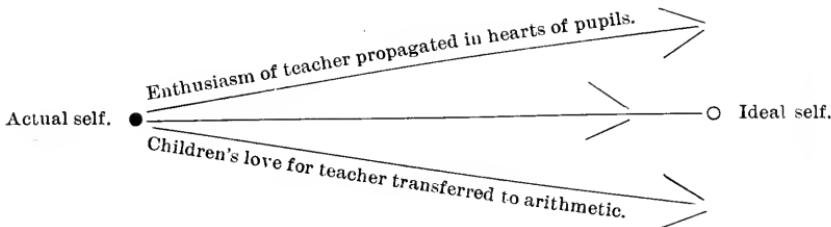
(The speaker illustrated the truth of the first of these laws by reference to the way persons attending a funeral are affected by the feelings of grief manifested by the chief mourners: also by the feelings of anger aroused by being addressed by an angry person).

Admitting then, the truth of the law "Feelings tend to propagate themselves," how can it be applied to the purpose of strengthening the desire? The teacher can apply it, by *loving the subject himself*. The enthusiasm for the subject stirring the teacher's heart will be communicated to the hearts of the children. It is, perhaps, unnecessary to say that this enthusiasm on the part of the teacher must be REAL, and cannot be felt without an earnest study of the subject and a careful preparation of lessons.

(The second law "Feelings are transferable" was illustrated by the way in which children transfer the interest in their food to the cup out of which their food is usually taken, etc., etc.)

But how can this law be applied to strengthen the desire? If the pupils love the teacher, this love will certainly be transferred to the subject he is dealing with, viz., arithmetic.

The matter may now be illustrated thus:



*THE PRACTICAL VALUE OF PSYCHOLOGY TO THE  
TEACHER.*

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It would be an interesting task to trace the history of psychology from its earliest crude and haphazard beginnings to its present state of advancement with its wide range of enquiries and interests, its struggles to attain exact scientific results, its efforts to employ experimental methods, its laboratories, its failures, its achievements. I have not to speak, however, of what psychology has been or is; but assuming that to be sufficiently familiar to you, I must attempt briefly to point out some of its applications to the great and noble art of teaching.

We may consider the importance of psychology to the teacher in (1) the discovery of the inter-relations of different lines of study, (2) in organizing and systematizing his own mental life, (3) in guiding the process of bringing together the subject of study and the subject who studies, *i.e.*, in helping the teacher as (*a*), director; (*b*), student; (*c*), educator.

I.—THE TEACHER AS DIRECTOR.

The teacher must know something about the inter-relations of different studies. He has to arrange the time-table, and frequently to teach several of the subjects. Even where he is restricted to the teaching of some specialty he should know how his special subject is related to the others pursued by the pupils he is teaching. Does psychology occupy such a place as to make it specially valuable in seeing the inter-relations of various studies? Let us examine. Wundt divides studies into three great classes, (*a*), the natural sciences; (*b*), the mental sciences; (*c*), the philosophical enquiries. He claims that psychology is complementary to (*a*), the natural sciences, assisting in the treatment of problems otherwise inadequately solved; is the foundation of (*b*), the mental sciences, as dealing with the simple data and underlying principles of all mental sciences, and lastly it is the natural preparation for and introduction to (*c*), the philosophical enquiries.

That psychology is complementary to the natural sciences may be illustrated by a number of commonplace and well-known instances as the case of the "personal equation" in astronomy, where it becomes

necessary to take account of the apperception and reaction time of the observer, who is using the transit instrument, to prevent mistakes. Familiar examples illustrate that the abstracted, mathematical and physical properties of the observed phenomena do not alone explain the appearances, *e.g.*, the larger apparent size of the moon when near the horizon; the apparent motion of the sun. Other simple illustrations might be taken from the optical illusions arising when what is termed "pencils" of lines are drawn from a point between two parallel lines, cutting the parallel lines in various directions, make the parallel lines seem to curve outward; while lines drawn from points outside the parallel lines and terminating in an imaginary line midway between the parallel lines, make the parallel lines appear to curve inward, etc.

Cases of color contrast afford other illustrations. A continuous strip of gray on contiguous surfaces of black and white appears darker on the white and lighter on the black background; the same gray placed on backgrounds of red and of green appears greenish on the red and reddish on the green background.

The British Scientific Association places psychology among the natural sciences in its meetings by making it a sub-section of physiology. The American Scientific Association places it under the second group of mental sciences by making it a sub-section of anthropology. It belongs to both places.

Only a slight examination is required to see that for the mental sciences psychology is just as fundamental and underlying as mathematics is for the natural sciences. Note any recent advance in these and you will find it resting on insight into and application of some psychological principle. Look at the new methods of teaching grammar, not *before*, but *through* the language to which it belongs. Look at the complete revolution in method in the manner of teaching and using *rules*, once first, now last in the process, once announced and memorized, now discovered and constructed by the pupil himself.

Look at the improvement in history in such works as Green's Short History of the English People; going beneath the events to the life of the people, their aims and passions, and the analysis of the character and motives of the chief actors. Look at the improvement in political economy by the introduction of psychological and ethical considerations. What may we expect in law when some of the time spent on procedure in criminal law is applied to the study of the *criminal* himself?

As to the value of psychology as an introduction to the philosophical enquiries, an objection might be raised that all of them, philosophy, æsthetics and theology, claiming to deal with the true, the beautiful and the good as ideals, are ultimately based on metaphysics, and the less we have to do with metaphysics the better.

Modern philosophy, however, should not be confounded with the much-misunderstood and much-maligned mediaeval disputations any more than modern chemistry with alchemy, or modern biology and medical science with the views of Theophrastus Bombastus Paracelsus. And even the superseded past should be remembered with some gratitude and respect as the progenitor of the present. "Honor thy father and thy mother." Those who cry out most loudly against metaphysics, past or present, are in almost every case the unconscious victims of the shallowest and most erroneous forms of metaphysical speculation.

It is philosophical speculation carefully conducted which has done most to expose false principles and to amend crude and erroneous standpoints. If we mean by philosophy, reflection on the meaning of experience, reconsideration of the significance of the results gained in scientific investigations, then, instead of saying no one should have anything to do with philosophy, we should rather say everyone should have something to do with philosophy.

Everyone who reflects on the meaning of life and its experiences, who desires to pass beyond the mere appearances and discover their worth and importance for life, conduct and destiny, is to that extent a philosopher.

It is necessary to specialize in science to gain results. But every scientist in every field has not only the privilege but also the duty to give more than mere details connected with his specialty. He should endeavor to give hints concerning their ultimate meaning as this is revealed to him. At any rate, the teacher cannot be a mere pedant. He must be a man as well as a scholar, and he will give a respectful hearing to such investigations and cultivate an intelligent interest in them. For this, psychology is a useful introduction and preparation. May we not conclude that psychology stands in such a central position and in such intimate connection with every branch of enquiry that it is peculiarly fitted to assist in their co-ordination?

#### II.—THE TEACHER AS STUDENT.

It is scarcely necessary to say anything about the importance of continual study to the teacher. He must keep alive his interest in

what he is teaching by continually enriching his mind by new enquiries and acquisitions.

Our studies should be organized. Each new discovery should be made to throw light upon everything we already know.

By reflectively, actively organizing in this way the mind gains strength and insight, keeps alive its old interests and creates new ones. Thus study is made delightful and fruitful, thought is trained to become consecutive and successful. The teacher should himself be a thinker of this type and he should have psychological insight to enable him to guide his pupils to attain such an intellectual culture.

### III.—THE TEACHER AS EDUCATOR.

What the teacher acquires and gains in his own self-culture is, as teacher, a means; the end sought by him is the training of pupils. He must stimulate and awaken interest. He desires to make the subject of study a means to transform the whole character of the subject who studies. In order to accomplish this, the teacher must keep in mind the logical order of a correct presentation of the subject of study; the stage of development and powers of his pupil and the laws of his mental growth; that he may gain the result, the developed pupil. In order of presentation, he must proceed from the simpler to the more complex, and the simpler is not the most abstract but the most concrete, for he must also proceed from the known to the less known. He must arrange the presentation so that a puzzle or problem is proposed and suggested to the pupil, and his curiosity aroused to endeavor to solve it.

The teacher must sympathetically place himself at the pupil's standpoint, if he desires the pupil to advance to his point of view. In order to do this, he should endeavor to recall the stages and processes whereby he as pupil proceeded, when he was at the stage now occupied by his pupil. The ability to do this, probably accounts for the fact that, in many cases an English-speaking teacher will be more successful in teaching pupils the rudiments of a foreign language than a native. It may also account for the fact that so large a proportion of young and inexperienced teachers succeed as well as they do.

The most important service of psychology to the teacher, is that it leads him to consciously and systematically study his pupils, and thus awakens or intensifies his interest in them. Surely, if a doctor becomes interested in the discovery of new diseases and new remedies for them, a teacher should be interested in each new pupil and in each experiment for his improvement.

An individualized interest makes a teacher as careful of his pupils as a fond mother is of her children. He is on the alert to see that the physical well-being of the child is not neglected. Has the child bad habits of sitting, or studying, or walking, or breathing? He discovers the cause and endeavors to correct kindly, wisely, and at once. Proper physical habits conduce to health and morality.

Is the child untidy or unmannerly? The teacher leads him by example and considerate advice. The child is respected and is taught to respect himself. Is the child dull and stupid? The teacher endeavors to find out if ill-health, or poor food, or ill-usage at home, is the cause; he encourages the child to play, and soon it will turn out that the teacher is found visiting the home and endeavoring to arouse parental solicitude and gain parental co-operation. This teacher will not neglect lighting, heating, or ventilation; he will be careful not to unduly fatigue his pupils, and will be found supervising their plays without officious interference. He will even be found guarding the out-houses and walls from the desecration of perverted vandalism. He will be the guide, counsellor and confidential friend of the adolescent pupils; guarding them with solicitude and watchfulness in this critical period of unstable equilibrium, when the nature is plastic and responsive to the promptings of the highest ideals, and when, on the other hand, the danger is so great of the beginnings of perverted habits and criminal tendencies arising, if the pupils are neglected, and allowed simply to "grow up" like Topsy or Ruth Bonnython.

Let us now recall some examples of assistance from psychology, in arrangement of time-table and presentation of the subject of study.

The thoughtful teacher will distinguish between the more severely logical and mathematical subjects, and the historical and literary. For the former, more concentrated attention is required, and therefore, these should be placed in the early part of the programme. When it comes to reviewing, it will turn out that the second class of studies requires more repetition and reviewing. Pupils should, however, be taught to recall directly what they have previously read and studied, without using the book to assist them. The memory should be trained in self-reliance. Perhaps it is in connection with memory that most people would think of the assistance of psychology to the student.

Kant says memory may be mechanical, ingenious, or judicious. I think it must be confessed that the earliest attempts to apply psychology in assisting and directing memory training, were chiefly of the

"ingenious" kind, discovering curious and arbitrary connections in accordance with the law of the association of ideas, through similarity, contrast and contiguity.

Many text-books seem to be constructed with the view of employing the "mechanical" memory. It is supposed that the briefer the summary, the easier it will be to learn and remember. The student is supposed to con over the tables and learn them by sheer repetition.

A deeper insight will indicate more "judicious" methods. The great rule for memory is "take care of the knowing and the recollecting will take care of itself." Let the subject be taught and studied logically, systematically, thoroughly, and woven as widely as possible into the warp and woof of the mental interests and thoughts of the pupil. In this way the time spent in one subject is not taken from all others, but is contributing to all others. It is a popular fallacy to suppose that all the time spent in one subject is subtracted from every other.

The trained and experienced teacher educates all the powers of his pupils, and utilizes every subject for this purpose. He keeps clearly before his view the result to be attained, carefully selects the most efficient means, and with solicitude and interest observes and directs the process. He desires the full and harmonious development of *all* the powers and capabilities of the pupil, physical, mental, social, moral and religious. He is aware that he is co-operating with the pupil in the formation of character. Is there anything of higher value? This thought makes the teacher reverent, it impresses him with a sense of his responsibility; it also enables him to respect his profession and see in it one of the noblest efforts of human endeavor. Although our Public Schools are sometimes accused of giving a merely intellectual drill, no teacher worthy of the name is limiting his efforts to this. He is bending every energy to attain discipline and training of character, by means of the intellectual and the disciplinary; he strives to inculcate ideals and form habits of faithfulness, honesty, uprightness, industry, truthfulness, obedience, reverence.

Mark, he is not teaching *definitions* of these, that would be a "merely intellectual drill." He is moulding the character into these moral habits. It is just because the Public Schools are so efficient that Sunday School and home continually desire to relegate more and more to the Public Schools. The careful and reverent study of the child is destined to react upon home, Sunday School and Church. If child-nature had been studied should we find the text "Except ye

become as little children, ye cannot enter the Kingdom of Heaven," so continually misinterpreted to mean that there should be passive admission of truth without questioning or enquiry? Is that the way the child learns or acts? Should not our religious life exhibit the same fearless confidence in asking questions and the same readiness in putting into practice the answers that the active child displays?

It would be a wide field to follow the pernicious effects of un-psychological methods of parents and teachers in the suppressing of questions, and stifling the religious cravings of children. We have too often "offended these little ones."

Sooner or later truer psychological methods, as exemplified in the Kindergarten, will permeate the whole school system and overflow into the Sunday School, the Church and the home. Let me add to the teacher interested in the study of psychology and its applications to his profession:—Remember that the Science of Psychology, with all its intrinsic importance and immediate usefulness, is simply the portal and propadeutic to the higher reflective problems of the ultimate significance of life, and art, moral conduct, and religious aspiration. As in your teaching you desire the intellectual to be the means to lift up the pupil to higher ground, prepare him for the reception of the highest truths, so let these lofty themes be in your own life constant topics of interest, perennial sources of new insight, continual fountains of noblest inspiration.

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*THE PRACTICAL RESULTS OF CHILD STUDY.*

F. TRACY, B.A., PH.D., TORONTO.

It has been said of the Child Study Movement, by one of its leaders, that it exists primarily for the sake of the child, secondarily for the sake of the teacher, and incidentally for the sake of science. We heartily concur in this statement. Science is not an end but a means. It is the pursuit of truth, and it exists for the sake of truth. The teacher *as a teacher* is not an end, but a means. Teaching is character-building, and the teacher exists for the sake of the character whose development it is his aim to further. The child, i.e. the developing human character, is an end in himself. He is intrinsically of infinite worth. Human character is not valuable merely on account of something else which it may accomplish or acquire; it is valuable *in itself*, valuable for what it may *be*. He, therefore, spoke wisely who said that child study exists primarily for the sake of the child. Incidentally there have been results of considerable value to science, particularly to Psychology; but as these can scarcely be called *practical* results in the sense intended here, we shall take no further account of them at present. The beneficial results of child study to the teacher are very great, but these, for the most part, are benefits to the teacher only in a secondary sense; they are benefits that come to the child *by way of* the teacher. Intelligent contact with child-life will awaken the teacher to a more genuine interest in his work; and this is a benefit both to the teacher and to the child, but we rejoice in it mainly for the child's sake. Again, if you will allow me to use the word "teacher" in a sense broad enough to include the parents, one of the very best results of this movement is that it is bringing the home and the schools into closer sympathy with each other, and quickening the parents' interest in their own children. The importance of this can scarcely be over-estimated. The home is the school par excellence and parents, whether they realize it or not, are character-builders in a far more vital sense than the teacher in the school can ever be. The educational problem of the future, nay, the most pressing educational problem of the present, is not that of introducing religious instruction into the school, but that of leading parents to realize the privilege that is theirs, and the responsibility that goes along with it, of surrounding the child, *in the home*, with such influences as will tend

to the highest development of the best that is in him. Child study has already done something, and may be expected to do a great deal more, towards the solution of this problem. Parents are beginning to realize that they are co-workers with the teacher in the education of their children.]

But child study exists "primarily for the sake of the child." Consider whether the movement will justify itself from this point of view. Surely a consideration of its standpoint and fundamental principle would predispose us in its favor, even apart from an inquiry into the results actually accomplished. It is the Copernican standpoint introduced into Pedagogy. It was a good day for Astronomy when its standpoint ceased to be Geocentric and became Solocentric. It was a good day for Philosophy when, in the hands of Socrates, it became Anthropocentric; and it will be a good day for Pedagogy when it becomes consistently *paidocentric*. And this is exactly what child study will help to make it. The watchword of the new movement is simply this: Let us understand the child better; let us study carefully his nature in order that we may adapt our educational methods to that nature, instead of trying to adapt that nature to our methods. New emphasis is laid upon the fact that all our educational machinery exists, and should exist, for the child's sake, and not vice versa. School houses, school grounds, school hygiene, school books, school curricula, school teachers, school examinations, school conventions, school expenditures, all the vast and complicated structure of our educational system, from the Minister of Education down to the humblest caretaker of the remotest school building, all these have no other reason for their existence than the fact that there are children in our country, and that the highest good of these children is an end in itself, an end of supreme importance. The child is the centre of the educational system, as the sun is the centre of the planetary system.

The immediate, general result, then, is this, that everything in educational work is being tested by reference to the actual living child. If any suggested reform is found wanting when weighed in these balances, it is discarded. The question will no longer be whether it is easier for the teacher, or whether it will prove financially economical, but: Is it best for the child? On this basis the educational systems of the future will be built.

Further remarks regarding the practical results of child study may be grouped, for brevity's sake, as they bear upon the psycho-physical, the intellectual, the volitional, or the moral nature of the child.

(1). The psycho-physical. The child is first of all, and most obviously of all, a living being whose mental life is conditioned upon the functioning of an animal organism. Colors, and sounds, and tastes, and touches, and sensations connected with his muscular activity, these are the raw material upon which he works in rearing the superstructure of knowledge; and these sensations are possible because he has a body. Hence the importance of a healthy and vigorous organism. Hence the importance of such questions as these: Has the child normal vision, or is he near-sighted? Is he dull of hearing? Has he catarrh, or any other disorder that interferes with the freedom of breathing? In short, it is of great importance that, if any child is afflicted in any way that prevents the normal functioning of his sense organism, the teacher should know it, and deal with him accordingly. Many a child has been flogged for stupidity or laziness, when, as a matter of fact, he was deaf, or near-sighted, or color blind. The teacher who is a child-student will be sure to know of such cases, if they exist in his school, and the parent who is a child-student will see to it that such cases, if they exist in his family, are reported to the teacher in order that the method may be adapted to the needs of the individual child. Some of the results already achieved in this direction are of great value. In England a report has recently been issued, of investigations into the mental and physical conditions of 100,000 children, with special reference to defects of various sorts, such as those already mentioned. In many of the large cities on this side of the Atlantic similar investigations have been carried on, the object being to establish a scientific basis for the study of the requirements of child-life.

(2). In the second place, the child is an intelligent being, a being with ideas and thought-activities. Child study helps the teacher to understand the order of development in the life of cognition, so that he is able to avoid the error of forcing into chronological priority, those studies that are naturally sequent to, and dependent upon, others. It will also enable the teacher to approach the child through his *interests*, and so to follow a natural order along the line of least resistance. The studies of Binet and Barnes have shown that small children are interested in things, on account of the *uses* to which they are put, or the functions which they fulfil, rather than on account of their form, substance, or any similar attraction. In fact, the natural order is to avoid abstracted phases of reality at the first, and dwell upon the (vague) concrete whole, as Dr. McLellan has pointed out in the *Psychology of Number*.

Another achievement of the child study movement, which is of the highest significance, is the emphasis which it lays upon the Herbartian principle that new instruction should be based upon and connected with that which is already in the child's possession. We have to recognize clearly the fact that the child does not *begin to learn* when he comes to school for the first time. His mind is not a *tabula rasa* when he enters school. On the contrary, he is already in possession of a multitude of ideas; and the work of the teacher is not to *begin* his instruction, but merely to *continue* it, and if he is to succeed in this work of continuing the child's instruction he must present truth to the child's mind in such a way that it will link itself naturally and logically to that of which he is already in possession. And if he is to do this he must know something of the contents of the child's mind when he enters school. And this information he can obtain partly by careful observation of the new scholar, and partly by consultation with the parents regarding the child's surroundings prior to the date of his entry into the school. Most of us are acquainted with Stanley Hall's *Contents of Children's Minds on Entering School*, and other investigations of a similar character, but I venture to think that this pamphlet of Dr. Hall's was a revelation to many a teacher when first he read it. Herr Rein, of the practice school at Jena, attaches great importance to the information obtained from the parents of each child, by means of question sheets (*elternfragen*); and the Child Study Association of Ontario, with the co-operation of the Minister of Education, has issued a set of observation-blanks to the teachers, whose filling up will necessitate a consultation between the teacher and the parents of every child that comes into the school. By these means we shall hope, in the future, to make the child's school-life the natural and logical sequel to his pre-scholastic life in the home, and to remove, so far as possible, the great chasm that, in so many cases, separates these two stages of his education.

Another result of child study which deserves to be called "practical" in a high degree is this, that the teacher who is a student of child nature will have a better understanding of the relation of the intellectual and the emotional in childhood and will shape his methods accordingly. He will recognize the fact that feeling is relatively much stronger than thought in early childhood; that abstract thinking, especially, is a new and strange business for the little child. Education means development of the child's nature *on all sides*, and in perfect symmetry; and if this is to be our aim we must recognize emotion-culture as well as cognition-culture; we must recognize that the

beautiful and the good are at least *as* valuable as the true, and that the culture of the child's aesthetic and moral nature is at least *as* worthy an aim as the culture of his intellect. We must also recognise the wide differences among children as regards emotional sensitiveness and reasoning power, as well as the wide differences in the same child at different stages of his development. Disregard or ignorance in respect of these things has in the past done incalculable injury to some of our children. And yet we actually hear it said sometimes, even in these closing years of the nineteenth century, that psychology is no very necessary part of the teacher's professional training! One might as reasonably expect to succeed in agriculture without a knowledge of *soils*, as to expect to succeed in pedagogy without a knowledge of *minds*.

(3) In the third place, child study has called attention to the child as a being of activity and movement, as a being in whom action is as fundamental as sensation, in whom every sensation, every idea, tends to find expression on the motor side. It lays emphasis, therefore, on the importance, nay, on the absolute necessity, of educating the child in conformity with and by means of his spontaneous activities. It has led us to see that the suppression of spontaneous movements in young children, means also the suppression of mental activity, and so defeats the very end which it was intended to further. It has led us to see that the teacher who says to the little child, "sit still while I educate you; keep perfectly still and assimilate the instruction which I am imparting to you," is guilty of as great an absurdity as though he should say to the fire, "keep still while I kindle you, keep perfectly still and consume the fuel which I heap upon you." The child is not like a bucket or a sack which must be held still while it is being filled; he is more like a fire, whose very life and progress are conditioned upon its unceasing, restless activity of movement. The only way to make the fire keep still is to put it out; the only way to make the little child keep still is to kill him; and you will kill him, intellectually, if you make him keep still. Movement is a part of his very life; in him the reflex arc tends strongly always to complete itself; every *impression* naturally finds its outlet in a motor *expression*, and therefore, if we seek to cultivate his mind, while at the same time suppressing his activities, we are putting asunder what God has joined together in the child's nature, and doing violence to a fundamental law of his development.

But still further, not only is movement, as such, fundamental in child growth, but there is a natural order of development in muscular control. Child study has made one of its most valuable

contributions to the science of education in pointing out that the larger muscles come first under control of the will, and the smallest muscles last of all as a general thing. The child's first arm-movements, for example, are *whole-arm-movements*, then elbow, then wrist, while the independent control of each finger is a somewhat late acquirement. Every mother knows how awkward the baby is with his fingers, long after he has become quite expert with the arm, or the hand as a whole. The practical educational corollary from this fact is that in learning to write he should be allowed to begin with large ovals and curves, instead of the minute "pot-hooks" of the older method. Similar corollaries are deducible with regard to drawing and other subjects.

(4). And what shall I say finally of the light which child-study has thrown on the *moral* side of education? This is, perhaps, the most difficult question of all for the parent and teacher to deal with. The responsibility is very grave. It would seem that when the children come under our care they are already brimful of potentialities and possibilities and tendencies looking in *every* direction. Every normal child has in him the possibility of the attainment of high moral excellence, as well as the possibility of deep moral depravity, but the young child is neither the one nor the other. As Sully points out, in the little child there is, strictly speaking, no morality, but only the raw material of it; and we make a great mistake when we judge his words and actions by adult standards. What looks very much like a lie, may be, in the case of a little child, something far less morally heinous; what appears to be a spirit of wanton cruelty to animals may be, in reality, nothing of the sort; what seems most abominable selfishness and greed may be entirely devoid of those characteristics that are essential to moral egotism. In short, what Rousseau says in regard to our judgments of children in intellectual attainments, is true also of our judgments of their moral attainments: "One moment you say he is a genius, the next moment you say he is an imbecile. You deceive yourself in both cases. *He is a child.*"

Alongside of this fact, that the child is a being full of tendencies and potentialities capable of development in both directions, upward and downward, we have to place this other fact, that he is, as a general thing, exceedingly susceptible to the suggestions that come from his social environment. And not only so, but children differ from one another so much in this respect that the social environment of *each child* ought, if possible, to be carefully adjusted to his disposition and needs. In the ordinary school this is a task so difficult

as to be well-nigh impossible, yet the teacher who is a child-student can do it if anyone can.

This susceptibility of the average child to the influence of his social environment is so great that I would say, as my closing word on the practical results of child study, that it has made us more than ever alive to the importance of taking moral character and deportment into account as well as intellectual attainments, in the selection of our teachers. I sincerely hope that the day will come when school trustees will no longer allow themselves to be guided by motives of financial economy merely, in engaging teachers; nor even by considerations of scholarship, by themselves; but shall enquire most carefully into the moral character of the person who is to stand daily in the presence of their children, and whose every word and gesture and action is to stamp itself upon the observant and imitative natures of the children who receive their instruction at his hands.

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*LEFT-HANDEDNESS.*

F. TRACY, B.A., PH.D., TORONTO.

The subject of this paper is full of a speculative interest; and is not without a certain pedagogical and practical bearing as well. There are three main facts around which the chief interest gathers: (*a*) That from the remotest ages and in all countries, human beings have used habitually and preferentially *one* hand in the performance of certain acts. The distinction of right and left handedness is very ancient and very widespread. (*b*) That the preferred hand, in the vast majority of cases, is the same hand which we now know as the right hand, viz., that hand which is on the south side of the body when one faces the east. (*c*) That everywhere, and in all ages, there has been a small minority (probably about two per cent.) who prefer the other hand, and are therefore called "left-handed."

The distinction is a very old one. Biblical history is full of it; all languages bear witness to it. The left hand is called, in almost every language by a name which originally meant "clumsy," "foolish," "mistaken," "dirty," "unlucky," or something of that sort.

Moreover, not only is the evidence overwhelming for this first fact of a very widespread preferential use of one hand, but the evidence is almost equally conclusive for the second fact, viz., that in every age and country, the right hand is the same hand that we now call by that name. Sir Daniel Wilson found in his researches among the remains of Palaeolithic art, that drawings in profile were, in the great majority of cases, made facing the left—obviously the natural position for the work of a right-handed artist.

If we turn now from the *facts* to the *reasons*, and inquire: Why is the human race predominantly right-handed? And why is that particular hand preferred and honored? The two questions do not present by any means the same degree of difficulty. The first is much more easily answered than the second. The number of human occupations in which, in an organized society, co-operation is necessary, and the number of those occupations in which it is necessary for those who co-operate, to work the same way (*i.e.*, with the same hand) is so great, that we can readily understand how, as soon as society had become to any appreciable degree organized, these circumstances would operate in a multitude of ways to bring about uniformity in

this respect. But when we ask : Why is the right hand the right hand, *i.e.*, why is the dexterous hand so universally the same hand, on the same side of the body ? The reason is not so easy to discover. Carlyle deemed it an insoluble riddle. Many investigators have labored upon it, and various answers have been suggested. Some have considered it an instance of the survival of the fittest. Since the heart is on the left side, say they, those warriors who carried the shield on the left arm, and fought with the right hand, were better protected as to the heart than others, and were, therefore, less frequently killed in battle. Others, again, tell us that the right side of the body is better supplied with blood than the left, and is, therefore, stronger; others, that the left cerebral hemisphere (which controls the right side of the body), is developed earlier and grows larger than the right. Sir Daniel Wilson seems to attach a good deal of importance to a case which came under his observation—the case of a left-handed person, whose *right* cerebral hemisphere was found to be distinctly larger than the left. The case seems, however, not quite conclusive. The fact is overlooked, that the superior weight of the right brain may just as well have been the *effect*, as the *cause*, of the left-handedness. Others account for the prevalence of right handedness by the fact, that in persons of normal anatomical structure owing to the arrangement of the vital organs, the centre of gravity is not in the middle line of the body, but slightly over towards the right, and thus the focus of the bodily movements is to the right of the middle line, and the right limbs consequently more strongly exercised than the left. This would seem, at first sight, a probable explanation, but it fails to account for the fact that these persons in whom the vital organs are transposed—the heart being on the right side, the liver and the heaviest lung on the left—are as frequently right as left-handed.

The Association for Child Study naturally became interested in a subject so closely connected with the early training of children in the schools, and it was thought that an investigation, carried on by the teachers of the Province, into the cases of left-handedness which might come under their notice, might not only throw some light on the theoretical question as to the source of right or left-handedness, but also (and this is what we most desire), might afford some practical guidance in the matter of dealing with left-handed pupils. Accordingly the following circular was issued in October, 1895, to a large number of the teachers of the Province of Ontario, and though the number of answers received is *comparatively* small, yet they contain

some valuable data on the subject in hand. The present paper is an attempt to summarize these results.

#### SPEECH AND LEFT-HANDEDNESS.

TORONTO, October 19, 1895.

The recipient of this circular is earnestly requested by the Ontario Association for Child Study, to aid in the investigations undertaken by the Association for the current year, by carefully observing the children under his charge, and answering, as fully as possible, any or all of the following question :

(1) In cases of left-handedness, is the use of the left hand *less expert* than, in your judgment, the use of the right hand would be in a right-handed child of the same age and circumstances ?

(2) Is the left-handed child less adroit in the use of the speech faculty than other children ? Is stammering, stuttering, or other awkwardness of speech, more prevalent among left-handed than among right-handed children ?

(3) Does the left-handed child, in moments of special excitement, gesticulate with the left, or with the right hand ?

(4) Speaking generally—of all children—do you find that awkwardness in gesture is accompanied by hesitancy of speech ?

(5) Describe any attempts you may have made to break children of the habit of preferring the left hand, and give your judgment as to the value of the results attained.

The answers to these questions will be considered by a Committee and the results presented in a paper to be read at the next meeting of the Ontario Educational Association (of which the Association for Child Study is a sub-section). You will confer a great favor by making these observations with all possible care, and sending your answers to the Chairman before January 15, 1896. Please note in every case the age, sex, and any special circumstances of the child.

F. TRACY,

*Chairman,  
The University of Toronto.*

MARY E. MACINTYRE,

*Secretary,  
Toronto Normal School.*

The nature of the questions was determined to a great extent by the consideration, that between the right hand and the speech apparatus there must be a very close and intimate relationship. The right hand and the tongue are the organs par excellence, for the expression of ideas; the cerebral centre for speech, and that for movements of the

right hand are (in right-handed persons) close together in the left hemisphere. Cases of aphasia are on record, in which the speech disturbance is accompanied by peculiar disorders in the writing power. It seemed to us, therefore, that questions bearing on their actual relation in practical life, might bring valuable results.

To the circular, about seventy-five or eighty answers were received. Some of these represent individuals, but in many cases the combined judgment of a school of a dozen or more teachers is given in one letter. Moreover, a good many of those who wrote individually described their observations of two or more cases, so that the total result of the circular is the judgment of several hundreds of persons, based upon observations of a still larger number of children.

The returns came from almost every part of the Province, the cities furnishing the largest number. The age and sex of the child are not always given, but so far as they are given, it appears that a slightly larger number of boys than girls were observed, and that a large majority of the cases were between five and seven years of age. In some cases the questions are answered categorically, without any explanation; in others, quite interesting details and explanations are given.

The first question was asked with the view of determining whether left-handedness is as deeply rooted and as "innate" as right-handedness; and also, whether there is any intrinsic difference between the two hands so far as the *capacity to become expert* is concerned.

In response to this question a very large majority declare, without any hesitation, that the left-handed child is fully as expert with his left hand, as the right-handed child is with his right hand. A good many go so far as to say that he is even more expert in nearly everything except penmanship, and some find him more expert even in that. Left-handed boys are found, in many cases, particularly expert in throwing a ball, and similar occupations. One teacher says, "I have had only one left-handed pupil, and she is about the cleverest pupil in the school, in every way." (It has been suggested that the superior skill of left-handed persons, if it be a fact, is due to the circumstance that efforts are constantly being made to make left-handed persons become right-handed; and thus, only those in whom the left-handed tendency is exceptionally strong hold out against the coercion of the majority. On the other hand, this very fact is alluded to by some teachers as explaining the inferior adroitness of left-handed persons, wherever this is the case. These persons are constantly being meddled with and prevented from becoming as expert as they should with the left hand). As regards penmanship, several observers suggest that

the left-handed child would be equally expert in this also, were he permitted to write from right to left (mirror script), for then the conditions would be the same as those of the right-handed penman, and this appears reasonable if we reflect that in the spontaneous hand movements of the infant, the hands, if they describe curves, will make those curves, moving not in the *same*, but in *opposite* directions (*i.e.*, if the curves made by the right hand follow with the hands of a clock, those made by the left hand go to meet the hands of a clock).

The second question presupposes the answer to the first. If the left-handed child should turn out to be less expert with his left-hand than a right-handed child is with his right hand, there would be some ground for the surmise that the right brain, to whose control the left hand is committed, is less adapted for expressive functions than the left brain, and it would hence follow that if the tongue and the dexterous hand are always associated in the same hemisphere, the faculty of speech would, in a left-handed person, labor under the same disadvantage. But as the first question was answered in the negative there was no reason to suppose the right brain to be, in any way, inferior to the left; at least, so far as the observed cases were concerned. Hence the answers to the second question were what might have been expected. The majority are emphatically negative. The left-handed child does not stammer or stutter more than other children. There are, however, a few instances to the contrary; and one of these is quite remarkable, viz.: a left-handed child who stammers, while his brothers and sisters, who are right-handed, are not troubled with any hesitancy of speech.

The third question was asked with the view of determining how deep-seated and natural left-handedness is by an appeal to emotion. Under the pressure of strong emotional excitement we are apt to show what we really are, independently of *acquired* habits. This question brought fewer answers than any of the others; but those who answer it are nearly unanimous. The left-handed child gesticulates with his *left* hand. In a few instances the gestures are said to be made, "sometimes, with the left hand, sometimes with both." In two cases the child has been "broken" of the use of the left hand; but in moments of special excitement, or when great speed is required, he returns to it. These answers leave no room to doubt that left-handedness is as deep-seated and natural as right-handedness.

The fourth question brought about seventy answers, the majority of which are affirmative. The awkward child is apt to be troubled with hesitancy of speech. Several of those who answer this question

in the affirmative, take pains also to point out that hesitancy of speech may *cause* peculiarity of gesture—the child is trying with his hands “to help out” his stammering tongue. Others, again, point out the fact that hesitancy of speech and awkwardness of gesture are common results of a single cause, viz., nervousness; a fact which I can fully corroborate from my own observations.

The fifth question requires first, a description of the means employed to break children of left-handedness; and secondly, an opinion as to the value of the results attained. Quite a large number replied that they had never tried to cure left-handedness in children, believing that *the left hand is the right hand* for some persons. Among those who made the attempt the means employed varied all the way from gentle persuasion—showing how awkward a left-handed person looks, and pointing out that everybody else uses the other hand—to tying the left hand behind the pupil’s back; I am glad to say that very few tried this last method. Some offered rewards for using the right hand; some persuaded; some took the pencil out of the left hand frequently, and placed it in the right; some would refuse to accept exercises done with the left hand; some would make the pupil go to the blackboard and use the chalk with the right hand.

As to the results: a very pessimistic tone runs through nearly all the answers to this question. A great many say the attempt is utterly useless, except in the case of the very youngest children—those in the primary grades. Some say it is practically useless with any child, as he will return, unconsciously, to the use of the left hand. Some say that they succeeded, but add that their success was in reality a failure, inasmuch as the child never attained to that degree of efficiency, with either hand, to which he might otherwise have attained. However, there are quite a number who claim to have succeeded tolerably well; others who claim success so far as the *pen* is concerned, but do not think it worth while to try in anything else; and others—a considerable number—who devote themselves to *training the right hand along with the left*, believing that the child ought to be, and can be, ambidextrous.

A very interesting question, which might have been asked, had it seemed probable that the teachers would be in a position to answer it, is the question of the *heredity of left-handedness*. The fact of heredity, in general, occupies so prominent a place in all scientific theories of the present day, that one might almost deny the adequacy of any scientific hypothesis which fails to take it into account. We have whole volumes devoted to the subject; and, as you know, an exceedingly

interesting discussion is going on among the Evolutionists, on the question as to whether acquired tendencies can be transmitted. I have received a letter—through the kindness of Inspector Hughes—containing some interesting information regarding a special case; a case in which left-handedness is found in three successive generations. The grandfather is left-handed naturally; but was “broken” of the habit, having learned to use the right hand while the left was being carried in a sling as the result of an accident. “But still, when he is in a hurry, he will pick up a knife or other tool with the left hand, but he is obliged to transfer it to the right hand, which is the more skilful.” The grandmother is left-handed in all her work. In the second generation, out of a family of six, one brother is right-handed; two of the sisters are partially right-handed, but use the left hand in such tasks as tying a knot or threading a needle; the remaining three are entirely left-handed. In the third generation, the family of one of the sisters mentioned above as partly left-handed, consists of three boys and a girl. The youngest boy is an infant, too young to show any preference for either hand. The daughter is right-handed. The eldest boy is naturally left-handed, but has become right-handed through persistent training; but in the case of the second boy (who also is by nature left-handed), the net result of all his father’s effort has been simply to make him ambidextrous, and very awkward with both hands; evidently much to the father’s disgust. “He apparently does not know the difference” (*i.e.*, between his right hand and his left), “and writes, throws and catches a ball, etc., with the right or left hand,” as may happen to be most convenient.

Summarizing all the foregoing we may say, that, in the judgment of a majority of those who answered our circular, the left-handed child is equally expert with the right-handed child, except, possibly, in the use of the pen; that left-handed children generally speak as readily and as fluently as others; that when excited they gesticulate with the left hand, showing that in their case the use of the left hand is perfectly natural; that hesitancy of speech and awkwardness of gesture are often found together; the former sometimes causing the latter, but more frequently both being the effects of a nervous temperament; and that attempts to break children of left-handedness are usually unsuccessful. There would seem, indeed, to be only one reason for making the attempt at all, viz., utility. Whenever the resulting convenience is likely to outweigh the trouble undergone, and in no other cases, does the attempt seem justified.

## INSPECTORS' DEPARTMENT.

### *MANUAL TRAINING.*

JAMES L. HUGHES, TORONTO.

True progress in manual training dates from the recognition of the fundamental truth that it is truly educational and not chiefly economic in its advantages; that it is one of the most perfect school agencies for the thorough development of the physical, mental and moral nature. The most important products of manual training are the invisible not the visible.

The educational advantages of manual training may be summarized as follows:—

- | It aids in physical culture. The physical exercise in connection with the work is strengthening to the muscles, but its best influence on the health results from the fact that it provides pleasant and interesting employment, and thus invigorates the nervous system. It is one of the most perfect tonics for the nervous system of both children and adults.
- | It is a great aid in discipline. Children both at home and in school are often restless and irritable because they have not sufficient opportunities for interesting productive occupation. They need occupation to relieve them intellectually and to provide a satisfactory application of their physical energy. Manual training accomplishes both of these most desirable results.
- | It aids in the development of the power of concentrating attention. It is not natural for most young children to love books. The power of giving attention is often seriously weakened by the efforts of teachers and parents to compel children to attend to things that are not interesting to them. There can be no developing attention without genuine interest. Real things are interesting to children. Even real things soon lose their interest, however, when they are used in school as objects to be examined or studied. Appropriate things suitable to the stage of a child's development never lose their interest if the child is allowed to use them in construction or in the execution of its own original plans.
- | It trains the observant powers. Children never look definitely at anything without a definite motive. They examine most definitely

when the motive is their own, and especially when the complete accomplishment of their purpose depends on accurate observation. Most of the old school processes develop the power of observing partially in response to the teacher's will. Manual training aids in definite and independent observation.

It develops the judgment of size, form, and the relationship of parts to wholes, and on this account it forms the best basis for mathematical culture. The development of apperceptive centres of size, form, and relationship in the minds of children is the essential foundation of mathematical power.

It helps to form clear conceptions in the minds of children. We really know definitely only those things which we have not merely thought out but wrought out.

It applies knowledge as it is gained. This is a most important principle in education. The productive power of humanity is weakened when knowledge is stored without definite purpose, or when it is communicated to a child before it has power to apply it. Our powers may be classified as receptive, reflective and executive. These powers cannot be thoroughly developed separately. The only perfect training of the receptive powers and the reflective powers is the training they receive as subordinate and essential stages in the achievement of our purposes, especially of original purposes. Executive power is the highest product of education. The application of knowledge, as it is gained, is the only perfect way of gaining it clearly, and of fixing it in the mind as an available element in mental equipment.

It makes pupils constructive instead of destructive. Man was not intended to be destructive but to be creative and constructive. If children are destructive, as they too often are, they have been made so by improper training. Every child prefers to be productive if it is supplied with materials suitable to its stage of development with which to exercise its creative and constructive powers.

It makes children happy, and happiness is an important element in moral development. All children are happiest when using their highest power. Their highest power is selfhood or individuality. The highest use of this power is creativity, or the production of original work. Childhood uses this power to best advantage in working with the material things of its environment. Manual training systematizes and defines the use of creativity and, therefore, typifies the ideal condition of human life, which is to have the whole human race happily engaged in productive work. One of the deplorable effects of imperfect training in the past is the wrong attitude of the race

towards productive work. Work, which should be man's highest source of joy, has degenerated into drudgery. All men must be producers in the ideal society of the coming day, when education shall have accomplished its perfect work. Manual training is the best school process for laying the true foundation for this ideal condition. Froebel says:

"God created man in His own image ; therefore man should create and bring forth like God. The spirit of man should hover over the shapeless, and move it that it may take shape, and form a distinct being and life of its own. This is the high meaning, the deep significance, the great purpose of work and industry, of productive and creative activity. We become truly God-like in diligence and industry, in working and doing, which are accompanied by the clear perception or even by the vaguest feeling that thereby we represent the inner in the outer ; that we give body to spirit and form to thought ; that we render visible the invisible."

It increases the opportunities for the discovery of the special power of each individual pupil. It is only by the discovery and development of this special power that the teacher can accomplish the real work of true education. Manual training aids not only in the revelation of the child to its teacher, but, what is still more important, it helps to reveal the child to itself.

It develops habits of accuracy, definiteness and exactness. These are fundamental constituents in character. They are the essential elements in truthfulness. There is no other kind of school work which so completely reveals the importance of accuracy, definiteness and exactness to the child as manual training. Its plans and calculations must be definite, its measurements and drawings must be accurate, and its work with saw, chisel and plane must be exact in order that its finished product may be perfect. The effort to secure definiteness, accuracy and exactness in material products helps to make them dominant in a child's life. When a boy forms a good piece of work he is incidentally aiding in the formation of a good character.

It is one of the best school agencies in the development of the powers of self-expression. True manual training is self-expression in form or in construction. Self-expression is the putting out of the original conceptions of our own inner life, the revelation of the powers of our individual selfhood. In early years the most perfect kind of self-expression in visible form is manual training. All children naturally use the material things of their environment as aids in accomplishing their own designs. Their work with sand, clay, stones, sticks, blocks, paper, cardboard and other material, is their means of achieving their most complete mental development, and the evolution of their selfhood.

The school should take advantage of this clearly defined tendency of childhood, boyhood and girlhood, and continue in a methodical way, after the child enters school, the educational process which nature led the child to adopt before it went to school. Till the child has reached the age of fourteen, manual training, the re-arrangement, re-adjustment, re-construction, re-organization and transformation of suitable material is the best possible process for self-expression. It is true self-activity.

The highest intellectual advantages resulting from manual training are the enlargement and co-ordination of the brain and the development of motor brain power. Nearly all the school processes of the past have developed only a one-power brain. They have trained the mind to receive knowledge and let it lie in a passive condition. All knowledge should seek expression. It should first demand adaptation to and assimilation with the kindred knowledge already in the mind, and then the enlarged and improved inner life should seek expression in an effort to improve the outer. The child's tendency to execute its plans should never be lost. Every educational process that either communicates knowledge directly to the child or trains the child to acquire knowledge for itself and stops there, develops the sensor or receiving brain only. It matters little, so far as complete brain development is concerned, whether the knowledge is communicated by words or through real things, whether it is received from the teacher ready-made or is gathered by the pupil himself. If school education stops at receptivity and reflection, at the acquisition of knowledge and the development of the knowledge-gathering and reasoning powers, the motor brain remains undeveloped, and the co-ordination of the sensor and motor neurological systems remains practically uninfluenced by school education.

It is of the highest importance that the improvement of the sensor brain should be accompanied by a corresponding development of the motor brain, and by the perfecting of the channels of communication between the sensor brain and the motor brain. Education is necessarily defective at its centre of vital power if it fails to preserve the true harmony of effective development between the receptive and executive parts of the brain, to enlarge the channels of communication between them, and to increase what may be termed the battery power of the brain, as its power to acquire knowledge is increased. The young man has less tendency than the child to achieve his purposes. It is a serious charge against educational systems that they render the race less effective by reducing its executive power and tendency.

The young child whose predominant tendency was to try to help before it had much power or wisdom, is transformed, so that, with increasing wisdom and power, it loses the desire to help.

Fortunately the child is not in school all the time or the results would be much worse. There are many opportunities outside of school for developing the motor brain, for co-ordinating the sensor with the motor brain, and for increasing the battery power of the brain to correspond with the increase of knowledge. They are, however, fewer and less stimulating in cities and towns than in rural districts, and men are gathering in increasingly large numbers in cities and towns. Even in the country, however, the schools should leave no important part of the child's development to chance, but there is a much greater need of manual training in cities and towns than in rural districts, not merely to give manual skill as a basis for industrial success, but as an aid in brain development and co-ordination.

While the introduction of manual training into schools should rest on its educational, instead of its economic value, it is well to recognize the fact that it has many economic and social advantages.

It preserves the taste for work which all rightly constituted children have naturally.

It increases respect for honest labor.

It gives men power to adapt themselves to altered economic conditions by enabling them to change from one occupation to another when circumstances make it necessary to do so. Trade schools make men slaves to a single trade; manual training should qualify head and hand for greater freedom in meeting new conditions.

It gives a careful, special training to those powers required by the majority in their life work.

It lays the foundation for an increase in national wealth by giving men and women the tendency to become producers, and by increasing their skill and intelligence. Mr. J. Scott Russell calculates that an unskilled workman is worth twenty-five pounds, a moderately skilled workman, fifty pounds, and a highly skilled workman, seventy-five pounds per annum to his country as a wealth producer.

It gives workmen, individually, greater earning power, and therefore, enables them to have happier and more cultured homes, in which the joys and soul stimulation of art, music, and literature may influence the family life.

It leads to more originality and greater individuality in the products of labor.

It is a great moral force. Swedish statisticians claim that since the introduction of Sloyd Manual Training in the schools of Sweden the people are more thrifty and less drunken.

Manual training accomplishes its best work in the early years of a child's life. This is one of the many reasons for the universal introduction of the Kindergarten. In recognition of this truth Froebel was two generations in advance of his successors. Froebel gave manual training in many adapted forms to the little children; his successors, most of them, began by giving it to the oldest children in the High Schools. Modern development is progressively towards Froebel. Grade by grade downward manual training is forcing its way. In time all will see, what Froebel saw so clearly long ago, that the developing influence of material things in productive self-activity and brain-making is greatest in the early years of the child's evolution, and that if not begun then it can never, by any possibility, produce its best effects. Like all other education, whose germs have not been developed in the first evolutionary stage, its later development is correspondingly weak and formal. The Kindergarten will in time become the universal basis for manual training, because it uses hand work as a means of head and heart growth, and at the period in the child's life when it is most developing to its active nature.

It may be well to state explicitly, what I have assumed throughout, that the girl is entitled to all the advantages of manual training as fully as the boy. This will be admitted without argument, when it is clearly understood that manual training should be given chiefly for educational, not economic reasons. Girls are entitled to complete development as fully as boys are. They should not only have manual training, but they should work with the same materials and the same tools as boys in early years. If needlework is good for the development of girls it is also good for the development of boys. If wood-work helps to develop and co-ordinate a boy's brain, and make him productively self-active, it will do the same for a girl. The ridiculous distinctions that have been made resulted from the blinding effects of utilitarianism. They will disappear with the recognition of the broader and truer educational basis.

There are some objections still raised to the introduction of manual training in schools. It may be well to answer them.

(1). It is sometimes urged that, because great manual skill is occasionally found with a low order of general intelligence, therefore, manual training cannot have much educational value. It is unreasonable to base general principles applicable to race development on

abnormal cases. It would be ridiculous to argue that, because "Blind Tom" possessed great musical genius, although defective in intellect, it is, therefore, wrong to teach music; or that arithmetic should be banished from the schools because Zera Colburn possessed astounding power to perform arithmetical calculations, and had little other mental power. It is equally absurd to oppose manual training because manual skill is not always accompanied by great brain power.

(2). "There is not time for manual training, as the programme of study is already too crowded." The real question that demands the attention of education is what is the best use that can be made of time? Manual training has more educational and more economic value than mere memorizing, than listening to instruction by even an able teacher in any subject, than grammar, or geography, or history, or spelling, or writing, especially as they are generally taught. Too much time has been given to most of these subjects. Too much time is given to arithmetic. Manual training should be correlated with arithmetic, geometry and drawing, and even with geography when it is properly taught. The proper correlation of the subjects on a school programme will save time and secure more thorough teaching. But, if no time could be saved by better methods of teaching the subjects at present on the programme, some of them should be taken off in order to make room for a subject of such high educational and economic value as manual training.

(3). "Manual training gives too strong a tendency towards special trades." This is, undoubtedly, a valid objection to trade schools, but not to manual training. The teaching of manual training in schools has not made too many artists. Manual training is excellent training for those who aim to be lawyers, doctors, ministers or business men. It is invaluable to any man or woman who requires a well developed, co-ordinated brain trained to use knowledge as well as accumulate it. The superintendent of one of the largest American cities told me recently that nearly all the graduates of the manual training school in his city entered what are called the learned professions after graduating from the manual training school.

(4). "Manual training will turn out a large number of imperfectly trained tradesmen." This is a baseless charge. Manual training will produce a body of easily trained tradesmen, who will have more knowledge in regard to the materials they have to use, more skill in using them, and more intelligence in discovering new uses for them.

(5). "Teachers have not been prepared to teach manual training, and therefore cannot do it satisfactorily." This objection, if valid,

would shut the door against all progress. Teachers have to rise to every new ideal. Manual training must be adopted gradually, step by step, as teachers are prepared for it.

Few have yet been able to follow Froebel to the mountain top from which he saw in manual training, in the constructive and transforming use of material, the revelation of the complete inner life of the child, and the basis of its moral training. To Froebel we owe our limited conception of the educational value of manual training, to him we shall owe our greater enlightenment when in the coming days we shall see beyond the mists and shadows, and understand that the proper use of objects, or material things, not only reveals new knowledge, widens and strengthens our faculties, develops and co-ordinates our brain power, and cultivates our executive force, but that it is the operative foundation of spiritual evolution.

Manual training must become an element in all the school training of young children in order that they may be fitly prepared for full development in the later stages of their evolution.

It should be introduced into all schools, not only to fit men and women for making a living, but to qualify them for higher living; not to teach trades, but to give more power; not to mould material things, but to mould humanity; not to give manual dexterity, but to lead to creative activity; not to make things, but to make better men and women.

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*MORAL TRAINING IN PUBLIC SCHOOLS.*

D. FOTHERINGHAM, TORONTO.

"The question of religious training is one of supreme importance and interest."—B. A. HINSDALE.

No subject connected with education bulks so largely in the mind of our most earnest thinkers as that of the moral training of the young.

In this province we claim one of the best educational systems to be found anywhere; but its wisest provisions deal with intellectual training. Those for physical training on scientific principles cannot be called effective; while for moral training the arrangements may be arraigned as either impracticable or out of touch with public opinion.

They are as follows:—"Every Public or High School shall be opened with the Lord's Prayer and closed with the reading of the Scripture and the Lord's Prayer, or the prayer authorized by the Department of Education. The Scripture shall be read daily and systematically, without comment or explanation: the portions used may be taken from the Book of Selections adopted by the Department for that purpose, or from the Bible, as the trustees by resolution may direct. Trustees may also order the reading of the Bible, or the authorized Scripture Selections, by both pupils and teachers, at the opening and closing of school, and the repeating of the Ten Commandments at least once a week."

I would submit that the reading of Scripture without note or comment, and the Lord's Prayer, or the prayer authorized by the Department, is not religious or moral instruction. Neither, in the ordinary sense, can the memorizing of the Ten Commandments be called instruction, although, reverently conducted, these exercises are conducive to moral results.

The truth seems to be that systematic and thorough instruction is impracticable at the time and in the way provided for.

That moral education is essential to good citizenship, is now a maxim of all civilized governments. Not only so. It is recognized as far more important than intellectual training in its power to make for the safety and prosperity of the State.

In England, Germany, France, Italy, the United States and Canada, so important is moral instruction held to be, that religious exercises

are ordered at the opening or the closing of schools, or both. In the first two named countries graded curricula are prepared, under government supervision, for regular, daily instruction, and periodical examinations in morals. At the same time Sectarian tenets are carefully excluded, and conscience clauses rigidly adhered to.

That religious instruction is regarded as of prime importance, is evident from the attitude of the German Government. Hinsdale tells us that "in no states in the world is more attention paid to the religious instruction of children than in the German States; and in no other Protestant States is so much emphasis laid on the subject in Public Schools as in those of North Germany."

And that public sentiment in England is of the same opinion is evident from the evidence forwarded to the Government by a Royal Commission appointed some years ago to investigate this whole question. In answer to the question, "Do parents desire moral training?" the Commission received affirmative replies from ninety-three per cent. of Voluntary (School) Managers, seventy-nine per cent. of School Boards, and ninety-eight per cent. of teachers answering. "It was manifest from the investigation that the people of England, by an overwhelming majority, desire religious instruction in the Elementary Schools."

If as thorough an investigation were held now in Ontario the conclusion could not be very different. The great body of our citizens realize that moral instruction is of vital importance to the well-being of the home and of the State; and would give liberal scope to those who, in good faith, would undertake, as did the two great parties in England in 1870, to furnish a national system that would bring every child under an efficient, intellectual and moral training.

In Ontario, to meet the demands of one denomination chiefly, a Separate School system has been granted, under careful provision, for thorough instruction in the secular branches of a primary education, and with the distinct understanding that the tenets of that church may also be taught during school hours. But were this system carried to its full, legitimate issues by all denominations, the efficiency of secular education would, undoubtedly, be seriously impaired, if not destroyed; and a strong and growing feeling is asserting itself in favor of one, and only one, system of schools throughout our province. The advocates of one system say, that to unify and strengthen the brotherhood of all citizens who must work shoulder to shoulder for our country in mature years, the children should be trained together.

Why should morals be excluded or neglected? Why should the ethical nature, that asserts itself almost as early as the intellectual, be ignored or left to the haphazard teaching of a child's environment, when that nature has in it far greater and graver possibilities than either of its other natures?

The advocates of secular (not godless) schools, and those who can suggest no good working plan for common moral instruction, tell us that the parent and the Church should give ethical training; and it is true that these are responsible in this respect, and can never relegate their duty to the State. But where all educators and enlightened statesmen are agreed that morality is essential to the permanency and prosperity of the State, the State cannot forego its right to see that its subjects are so educated.

The best authorities on the matter tell us that only forty per cent. of our school population are enrolled in the Sunday Schools of Ontario. Let us say that one-half of our children are in such schools. What of the moral training of the other half? In all likelihood their parents are too indifferent to send them there; and if so, these children are not likely to be sent to church service, and are practically growing up without any training of a right sort on their ethical side. Whence must our criminals be drawn in large measure? Undoubtedly, from the army of 300,000 that are outside the benign influence of these institutions.

It has been asserted, again and again, that it is the duty of the State to do this work of moral training, and it may fairly be asked how can this be established? It has already been shown that the most enlightened and most powerful nations of the two hemispheres practically support this theory. The common law of nations is based upon the Decalogue, and the leading principles of the Bible. This is historically and admittedly true.

In all modern, civilized governments the One true and living God is recognized; and He is appealed to as the ultimate and only true source of law and order. Oaths of office are administered in His name to rulers, judges, arbitrators, jurors and witnesses. Profanity and other moral offences are visited with severe penalties. When the extreme penalty of the law is pronounced, the immortality of the soul and Divine judgment are appealed to when the judge says, "And may God have mercy on your soul." Days of thanksgiving or of humiliation before Him are appointed. For the army, navy, houses of correction and the like, chaplains are appointed to instruct in the principles of Divine law, truth and righteousness; and the sessions of congresses,

parliaments and legislatures are opened by invoking the blessing of Him by whom kings rule and princes decree justice.

For these and similar considerations it will readily be conceded that the State recognizes a system of morals based upon the existence, the holiness, the justice and final authority of the One Supreme, unchanging, eternal Ruler.

Hence, the Word of God is the highest authority to which to look for a knowledge of truth, righteousness, justice, love of neighbor and loyalty to rulers.

If these conclusions are fairly reached, the next question to be asked is, how shall moral training be introduced and be made a part of school work? But before attempting an answer, it is only wise to look fairly and squarely at the difficulties that must be overcome.

First, we have the unworthy jealousies of Sectarians to which broad-minded and Christian men find themselves face to face, whenever they argue and agitate for moral instruction in the Public Schools, and which charges them with hostility to the system.

Then we have too many of the secular, selfish spirit who seek only material and present success, ignoring the best interests of their children and their country.

We have also a class of high standing, educationally and morally, who object to formal moral education in the school, because it savors of State, Church and denominationalism. Some of these assert boldly that it is not the place of the State to teach religion. True, but to teach the fundamental principles of ethics is not to teach the religions of the churches. It surely means the teaching of the underlying principles accepted by all churches.

There is further difficulty in the question of what is to be taught under the heading of morals or ethics: and, of course, as to how it is to be taught. Some claim that it is only to be taught incidentally, inferentially and implicitly. Others claim that there must be a syllabus and definite time for this work, just as for other studies.

Then, too, the questions are asked, who shall teach morals? The teacher or some one else? And shall time be taken out of the regular school hours for this purpose?

If these difficulties are approached as they should be—in a patriotic and liberal spirit—they may all be overcome. They are no more formidable than were those to be overcome in England, where “for twenty-three years the subject (of religious instruction) had been settled upon the peaceable basis of compromise; in practice its theoretical differences and perplexities have been obviated or solved; and, in

point of fact, the so-called ‘religious difficulty’ has ceased to exist.” (Memorial from the National Union of Elementary Teachers, 1893.) The memorialists proceed to say, “they venture to think that none can speak with more experience of the facts than the teachers themselves; and the teachers are aware that the instruction has been such as Christian theologians could collectively endorse. They know that the scholars have been carefully and reverently taught the essentials of the Christian faith as drawn from the Holy Scriptures.”

Here we have more than mere theory. We have the “settlement of 1870,” a wise and statesman-like compromise between the two great parliamentary parties, and we have the out-growth of its provisions for religious instruction. We find that only ninety-one School Boards out of a total of 2,255 in England and Wales had failed to provide for religious exercises. “We find the London School Board elaborating a full Syllabus of Bible instruction which is followed in all its schools, and occupies from half to three-quarters of an hour daily.” We find “explicit directions issued to the teachers as to the carrying out of the scheme.” In addition to the 450,000 children of London affected by this instruction, the influence of this scheme has been greatly extended by its adoption by 101 other boards, including several of the most important cities.

We are proud of our intimate relations with Great Britain, and proud of the inheritance we have received from her. Why should we hesitate to copy so practical and successful an example? Why should not the leaders of both parties in our legislature follow the example of British statesmen, and elaborate a workable scheme for the moral as well as the intellectual elevation of every child in Ontario? Why may we not have a commission, large and representative, to prepare, in harmony with the received principles of all denominations, an outline of truth that shall be hailed with pleasure by all right-thinking people?

It might discover text-books on morals that would simplify and forward its work.

Such commission should have power to call before it educational experts and men of experience; and after the fullest investigation and deliberation, we should be provided with a scheme that should satisfy all reasonable men.

The broad question as to what are the limits of ethical or moral teaching in schools has never been settled. There are those, like Spencer and Adler, among modern writers, who claim and teach the humanitarian doctrine, that the obligations which grow out of the

relations of man to his fellowmen alone belong to morals. Adler says, "ethics is a science of relations—of human interests and human ends."

Spencer's dictum may be summarized in his own words, "that conduct whose total results, immediate and remote, are beneficial, is good conduct ; while conduct whose total results, immediate and remote, are injurious, is bad conduct." "According to popular acceptance right and wrong are words scarcely applicable to actions with only bodily affects ; but such actions must be classified under these heads as much as any other."

This school of writers, therefore, excludes from the school-room the teaching of obligations to one Supreme Being, and to His laws as the ultimate standard of right and wrong. The law of expediency is, apparently, their ultimate standard. But, as Miller says, "any attempt to base moral obligation solely on human authority has always resulted in the weakening of the conscience, and the enfeebling of the will." "No nation ever achieved moral excellence that did not hold the Supreme Being as the final source of obligation."

In confirmation of this position, I need only call your attention to the abject and ruinous failure of the moral systems of Confucius and Buddha.

Another class of writers on educational topics teach, directly or by clear implication, that moral education, to be efficient, must involve the teaching of a final and infallible standard of right and wrong to which all are responsible.

The dicta of this school may be expressed in a quotation from our Deputy Minister's book : "The motives which flow from a belief in a personal God as the Creator and moral Ruler of the world ; in the dependence of man on his Maker, and in his obligation to love and serve Him ; in the immortality of the soul, and in the accountability of every intelligent person to the Supreme Being, are recognized principles of every efficient system of ethics."

The writers of both schools are agreed that the teaching of morals is *the* subject of supreme importance for the well-being of the State. But there is a marked divergence as to the mode of teaching. Not a few of the best educators maintain that the direct inculcation of moral principles, as the principles of intellectual studies are inculcated, is a pedagogical error ; and that all ethical instruction should be developed in the right teaching of secular studies and in the inculcation of order and compliance with the understood obligation of one to another, and of all to God.

Others as strongly insist that not only should morals be taught

indirectly in the instruction and government of the school, but also categorically, systematically, and from a comprehensive outline of common Christian belief, by the most competent instructors. Even Adler, whose system is typically altruistic and humanitarian, would have the teacher say "this is right and that is wrong," but he would not have the reason given. The more rational advocates of moral teaching would follow that information with its reason, would speak, discriminatingly, of course, of the basis on which actions should be tested, and would appeal to the principles of the Decalogue.

But everything depends on the teacher: "A teacher of high moral character is the chief requisite of moral training." "The teacher leaves his everlasting imprint on every child placed under his care." (Miller).

Those who ignore the importance of indirect moral teaching make a serious blunder. Few influences are so potential in character-building as those of the teacher of noble ideas and a noble life, who has true conceptions of what life should be, and whose constant aim is the development of true character in his pupils.

With teachers of such a type, it matters little whether direct moral instruction is said to be complementary to their influence, or that their influence is complementary to themoral teaching. The combination is ideally satisfactory.

How are we to secure such teachers? We already have many; and it should not be difficult to have introduced into our training institutions a department for giving instruction in the duties of teachers in morals, as is done in Great Britain.

"What shall be our text-book? Material for such instruction adapted to the needs of the child exists in great abundance. The Bible does not contain it all, but it contains the cream. Still it should not be taught to children indiscriminately. Highest on the roll of books stand the incomparable Gospels. The story of Jesus and His great utterances, as the Sermon on the Mount, and the parables of the Prodigal Son, the Good Samaritan, the Talents and the Sower, should be fixed in every mind. Paul's Song of Love and his Ode to Immortality should not be omitted. Some of the tales (of the Old Testament), as that of Joseph, Sermons of the Prophets, passages of Job, parts of the Hebrew Wisdom, and many of the Psalms, are unsurpassed, if not, indeed, unequalled, as means for creating noble ideas and developing noble feelings. Still more, the educative value of the Scriptures is much increased by the noble language in which the thoughts are clothed."—Hinsdale.

A DETAILED ACCOUNT OF THE INSPECTION OF OUR SCHOOLS.

JOHN JOHNSTON, BELLEVILLE.

When I commence the inspection of the rural schools in January, I generally begin with the fourth and fifth classes; in September, with the lower classes, giving the fourth and fifth classes a number of questions in arithmetic, reviewing the work of the third class and on the work of the fourth class as far as the class has gone, and afterwards giving the fifth class questions more difficult.

I am always at the school in the morning before nine and before the school is opened. I examine the daily and general registers, the copy-books, and the school premises before the school is opened. Part of the report to trustees is made out. It is not always possible to get to a school in the afternoon at one o'clock, so that the registers and copy-books are generally examined when the teacher is testing some class

Before entering a school in the afternoon or any time when it is in session, I knock at the door and enter without waiting for anyone to open it, the scholars in Trenton, Belleville, Deseronto, and in some of the rural schools rising and saluting, saying good morning or good afternoon, in response to mine.

During the first term of the year I generally call up the fourth and fifth classes with their slates, and give them a thorough review in mental arithmetic, giving them at first easy type questions, and gradually making them more difficult, such as, a man spent five-twelfths of his money and had twenty-eight dollars left, how much had he at first? and gradually making them more difficult, and ending with such questions as, four-fifteenths of the candidates failed in arithmetic, three-fifths in other branches and ten passed, how many wrote? I examine them in the same way on all the other type questions usually given to fourth classes, as found in mental arithmetics, giving the questions slowly and distinctly, and but once, and the class is required to solve it *mentally*, and in *perfect silence*, and without giving any sign or signal when they are ready to answer. After a space of time sufficient for the solution has elapsed, I ask those who have completed the work to raise their hands. One of these is asked to give the result. I then ask how many agree with it, and then call upon some one to *repeat* the problem, solve and analyze it for the class. In many

cases this is a poorly taught subject in the fourth class, even by teachers who have been at the normal school, and for this reason a good deal of teaching has sometimes to be done along with the examination. These teachers pay little attention to this subject in the fourth class, as it is not on the curriculum for entrance examination.

Then I give the class a thorough examination in grammar, reviewing all the work gone over and ending with questions on the moods and tenses, the conjugation of the verb "to be" and other verbs, the passive voice, the progressive form, the signs of the tenses in the indicative and potential moods, and ending with the analysis of some suitable sentences involving absolute and infinitive phrases and propositions of different kinds, and with the parsing of the important words.

By taking up this subject at the model school and at township conventions during the past few years, especially since the introduction of the miserable text book on the subject, teachers are teaching the subject much better than they did a few years ago. They do not teach such rubbish as, one noun possesses another noun, and they do not teach that such words as too, also, then, now, yet, therefore, still, else, hence, consequently, and likewise are conjunctions, but that they are always adverbs. They do not teach that the phrases in the following sentences are adjectiveal, but adverbial, modifying some word understood expressive of action or existence, as, "I see a book *under the table*," "The house there *on the hill* is to be pulled down," "The bricklayer *on the scaffold* threw a brick," "The man *at the gate* is my brother." They do not subdivide the potential mood into three moods, the potential, conditional and obligative, all copied from Whitney's miserable grammar. They do not teach that near and like are prepositions, but that they are always adjectives or adverbs. They do not now teach such rubbish as an infinitive in "ing." The pupils now understand infinitive phrases, and have no trouble in disposing of such expressions as, "they made the stick straight," "they made him king." They don't teach that adverbs modify prepositions. Their pupils are now thoroughly taught the participles and how to parse them in sentences, as from write, in the active voice, we get: present writing; perfect, having written; future, to write or about to write; and in the passive voice: present, being written; past, written; perfect, having been written; and future, to be written or about to be written. They do not call participles verbs, as stated in some late works, nor that "being written" is a perfect participle, as stated in the grammars.

The class is then sent to separate seats and given questions in arithmetic reviewing the work gone over, and such as they should

be able to do if the work had been gone over thoroughly and thoughtfully, and some time before the examination is over they are examined in definitions in fractions and other parts of the arithmetic. While they are working the questions given, the third class is being examined in reading by myself or teacher. At the close of the reading I examine the class in the spelling of the important words in the lessons gone over orally, giving them generally in short sentences to be spelled in their connection, the pupil repeating the word or sentence, and then spelling the word or sentence, making a slight pause after each syllable, and afterwards they are given a short test on their slates from the reader, and from the speller used in the schools of South Hastings for several years. The pupils are not asked to change slates, but each one looks at his own slate when I spell the important words, going behind the class to see if they underline the misspelled words. Teachers have been strongly advised to teach spelling by pointing out to the class the words that are apt to be misspelled in each lesson, when they are showing the class how to study the reading lesson. The teachers are expected to test and detect in the same way, after each reading lesson, the spelling of the words and sentences in the lesson, and to give frequent reviews, orally and on the slate. They are also advised to give plenty of time for the writing of words and sentences so that the writing may be done with the greatest care. In the meantime several questions have been given to the fourth and fifth classes and the answers taken as soon as, at least, a majority of the class has risen up. The third class is now examined in mental arithmetic, and they sit down on the front or side seats to be tested in working questions in arithmetic while the second class is being examined in reading, spelling and mental arithmetic in the same way that the third class had been. The second class is also examined in the definitions of arithmetic, and then tested in addition, subtraction, multiplication and division in plain work to test corrections, quickness and neatness, and in practical questions of the same kind as the mental but more difficult, requiring to be worked on slate. The process gone through in testing mental arithmetic with second and third classes is the same as with the fourth class; in every case the quick ones in the class are not allowed to hold up hands when they get the result, but a reasonable time is given for all to get the answer, and then the question is repeated and explained. In every school it is not possible, sometimes in a half-day, to examine all the classes, and sometimes the Part I. classes are not examined during the first term, but always during the second term. The Part II. classes are examined

in reading, spelling, orally and on slate, the words and sentences carefully written between permanently ruled lines on the slate, and them examined in the analysis of numbers as far as gone. This involves all the operations within the range of each number—addition, subtraction, multiplication, and division, and then some questions to add on board, and some given out to put on slate to be added, subtracted, multiplied, etc.

Before getting on with the examination as far as the second class, the fourth and fifth classes have been sufficiently tested in arithmetic, and taken up to be examined in history, or geography, or physiology, but generally the third and fourth classes are examined in physiology in the seats, the fourth class reviewing the work of the third class with the class, and then hurriedly examined in their part of the work. In history and geography of the third class, I do some of the examination and the teacher does the rest. The examination of the fourth class in these two subjects is conducted in the same way, partly by me and partly by the teacher.

The second class is examined in geography by myself and sometimes by the teacher. The examination in composition is generally in the shape of letter writing, to see if they have the proper form of a letter, and can write the heading, address, salutation, subscription and superscription in the proper places, with the proper abbreviation and punctuation marks, in accordance with the best authorities as shown at the Model School Conventions, and several years ago in all the schools.

Sometimes during the examination of the school the fifth class is tested in some arithmetic beyond fourth class work, in algebra, and in a school with two teachers, when the whole day is spent in the school, in book-keeping and in Euclid, but in a school with one teacher there is not always time for all the fifth class subjects.

In a well taught school, where the scholars have been taught thoroughly, and reviewed frequently, with a good deal of energy on the part of the examiner, all the above classes can be examined thoroughly and well in a half day of three hours, but where the scholars have not been thoroughly taught and thoroughly reviewed, it sometimes cannot be done, as the progress is somewhat slow with a badly taught class, and especially when you have to show how the conjugation of the verb in all the moods and tenses, and the participles and mental arithmetic should be taught, as it had to be done some years ago, and sometimes now, though the teacher may have gone to a Model school and the Normal also. We don't always get the results

that we should get from the amount of time spent in training. We have not enough of thorough, thoughtful teaching, and frequent searching reviews, so that when the pupils get over the work they know it, and can stand a thorough and searching examination. In schools taught by good, live, thorough, and energetic teachers, the scholars like to be examined, and such schools can be examined in all the subjects in a half day,

The attention of the teacher is directed to the bad, low, lifeless reading in some of the classes. Many teachers hear reading, but do not teach it. The best teachers give instruction, imitation and plenty of practice. They take up so much time in asking useless questions on what they call the literature, that there is not much time for reading. They are always advised to show them how to read, and to take some time when assigning the lesson, to explain the difficult parts and the pronunciation of all the difficult words, and to see that they stand in a proper position in the class, holding the book in the left hand and speaking loud enough to be heard in every part of the room. During the examination and at the close, the teacher is strongly recommended to be thorough and thoughtful in the teaching, and to review, from the first very frequently.

I always see whether the proper time and attention are given to writing, that is, half an hour each day, as laid down in the Course of Study. In some cases this is a carelessly taught subject, and the proper time is not always given to it. Teachers are asked to do more teaching, to give little work in note books and to insist that all writing should be done in the very best way. They call the notebooks, now, scribbling books, as if it was the intention to make the scholars scribblers. There are too many notebooks used. There should be less notebooks and more good, thorough teaching. The time table is examined to see if the proper time is given to each subject, but I have found in some cases, that it is not always followed as hung up in the school. In each class, the number of pupils is put down and marks from one to five given for each subject in which the class has been examined. At the close of the examination the pupils are addressed, pointing out where they did well and where they did not do well, and asking them to get up their work thoroughly and to be reviewed frequently. A report is then sent to the trustees mentioning what is all right and what is needed, and giving, as fully as possible, the condition of the school as regards the attainments of the pupils in the different classes.

*CHILD STUDY.*

F. TRACY, B.A., PH.D., TORONTO.

(AN ABSTRACT.)

The recent movement for the better understanding of child-nature, with a view to the application of that knowledge in better pedagogical theory and practice, is one which, so far as its fundamental thought is concerned, dates back to the beginnings of educational reform. Every man or woman who has made any real contribution to the science of education, has been moved thereto in the first instance, by his renewed interest in the nature of the being for whom all educational machinery exists; and that being is the child himself. And this is exactly what the Child Study movement stands for, viz., a better understanding of the nature of the child, and the order of his development. It seeks to lay emphasis in Pedagogy, where it is laid in every other science—viz., on knowledge of the being with whom we have to deal. Child study, then, properly understood, is not for the faddist, the mere theorist, nor the dilettante; it is for the serious minded and earnest parent and teacher. It has come into great prominence in recent years because it appeals not only to the prevailing scientific interest in that which is in process of development, but, also, to the perennial human interest in things human. The child is the *human being in process of development*.

The movement has already taken root in all countries possessing advanced educational ideals. It has found its way into the Universities, Normal Schools and Schools of Pedagogy; it has found favor with Governments and Departments of Education; it has received enthusiastic endorsement at the hands of psychologists, biologists, medical men and teachers, and it has enlisted the cordial sympathy of intelligent and earnest parents, and Sunday School workers.

There are several methods of Child Study. The earliest to be employed was the *individual* method, or the careful study of *one* child from day to day throughout an extended period, noting every aspect of infantile progress. This method can be carried out best by parents, and the most noteworthy example of it is to be found in Prof. Preyer's observations upon his little son, the results of which he published in *Die Seele des Kindes*. The antithesis of this is the *statistical* method, which seeks, by means of printed syllabi, to

investigate, not *many* things about *one* child, but *one* thing about *many* children. The "Studies" of Clark and Stanford Universities are examples. Still another method is that employed in many of the best Normal Schools, where the pupil-teachers are encouraged to make memoranda of anything that seems worth recording in connection with children, the records being afterwards classified and interpreted by specialists in Psychology and Pedagogy. Finally, to some extent, tests may be made and the results recorded with mathematical exactness by means of apparatus constructed for the purpose. Muscular control has been measured by these means, and a comparison instituted between children and adults.

The Ontario Association for Child Study, with the co-operation of the Hon. Minister of Education, have had drawn up and placed in the hands of the Inspectors, for distribution among the teachers, observation blanks, on which a record is to be made of every child entering the school. It is believed that these records will further the attainments of several ends, chiefly that of arousing in the teacher a real interest in the child for its own sake, and so improving his teaching power by making him, if possible, a more intelligent and painstaking observer of his pupils. Their purpose is also to deepen the interest of parents in their own children by requiring them to answer questions regarding the prescholastic life of each child, as well as to obtain the fullest possible information with regard to the heredity, the social environment, and the life history of each boy and girl, in order that methods of instruction and discipline may be adapted to the requirements of the individual child. It is also the intention to preserve these records in permanent form, so that some deductions of value may possibly be made in after years by a study of them, in the light of the subsequent career of the individual; and finally, to preserve copies of them at the Education Department, where they may be carefully studied by a committee of experts in Psychology and Pedagogy for any contributions which they may furnish to these sciences.

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*UNIFORM PROMOTION EXAMINATIONS IN RURAL SCHOOLS.*

W. E. TILLEY, MA., PH.D., BOWMANVILLE.

I.—ARE THEY DESIRABLE?

In institutions presided over by persons of ripe scholarship and long experience, whose positions are somewhat permanent, and especially where the institutions are rather complete organizations in themselves than parts of a common system, such examinations may have no useful place. But in our net-work of rural schools, presided over largely by teachers of limited experience, whose positions are far from being permanent, some system of uniform promotions is, in my opinion, not only desirable but necessary, if the best results are to be secured.

In the rural schools of my inspectorate, 107 teachers were engaged in 1896. Of these seventy-three held third class certificates; twenty-four were teaching for the first year, twenty-two for the second, and sixteen for the third; forty-six had charge of their schools for the first year, thirty for the second, and twelve for the third, i.e., seventy per cent. were, professionally, third class teachers, sixty per cent. had an experience in the profession of less than three years, and over eighty per cent., an experience in the schools in which they were then engaged, of less than three years. It is not to be expected that inexperienced teachers, whose connection with any one school is so short without anything to guide them, except the general regulations of the Education Department, will make the most judicious promotions. It is my experience that they fully realize their inability to do so, and that they are ever ready to receive hints, and to follow suggestions from those in a position to advise, in all school work, and especially in such as relate to the classification of their schools, the construction of a time table, and the promotion of their pupils.

Promotion Examinations should be an important aid to an inspector in determining the quality of work done in the individual schools under his charge. His visits are made to some schools early in the term, to others towards the end—to some on stormy days when the classes are small, to others on fine days when everything is favorable. The Promotion Examinations are held in all the schools on the same day, and as nearly as possible under the same circumstances. Only a part of

the work can be examined at the time of a visit. The answer papers from the various schools, after being valued, should be forwarded to the Inspector with a full report of the examinations, including the marks obtained, the age of each pupil, length of time in class, and any other items of interest bearing on the pupil's fitness or unfitness for a higher class. The Inspector should take time to carefully look over these answer papers, revise the values given, and take notes on the style and quality of the work, and report with hints to the teachers interested, especially the younger portion of them, but to no other person. These examinations tend to more definite work throughout the term, and act as a check to any attempt at undue influence, on the part of parents, to have their boy or girl advanced before the work of the present grade is mastered.

## II.—HOW SHOULD THEY BE CONDUCTED ?

Any system of Promotion Examinations to be satisfactory must (1) recognize the right of the teacher to make the promotions of his school subject to the supervision of the inspector, (2) be free from any element of competition as between schools, (3) ensure questions closely in touch with the work gone over, (4) require as little additional work and expense in conducting them as possible, (5) let the teacher know just where his pupils have done well, and where they have failed, (6) be directed or controlled by some one of experience and judgment, who knows the schools and scholars and their surroundings, at least fairly well. It would be well, also, if each teacher could be given an opportunity of seeing the work from a few of the best schools as a guide to the less experienced teachers as to the kind of work to expect from their pupils, but this, though desirable, is not easily carried out.

It may be as well for me here to outline the promotion system in use in my inspectorate. Our promotion examinations are held at the close of each half year, generally on the last two days of the term. The question papers are all prepared by myself and distributed to the school, one for each pupil writing and an extra copy or two for the use of the teacher. They are sent to the secretary-treasurer of the trustee board to be handed to the teacher on the morning of the examination. It is understood that one of the trustees will be present with the teacher, who presides in his own school, during the whole time that the pupils are writing. To enable both the inspector and the teacher to form an accurate idea of the work done by the pupils, the teacher marks the answer papers of all his pupils and then sends them all to the inspector for revision. After re-reading

the answer papers a report is sent to each teacher on the general style and quality of the work of his pupils, with such hints and suggestions as may be thought necessary or useful. When reporting to the inspector the marks, the teacher also gives the ages of his pupils, the length of time in their present classes, and any item of special interest bearing on the fitness of each for promotion. No attempt is made to unduly magnify the examinations. They are intended to be simply a test of fitness for more advanced work on the part of those seeking promotion, and an incentive to steady, faithful work in the school room throughout the term. The examinations have been conducted in Durham County for more than fifteen years, with, so far as I know, entire satisfaction to teachers and parents; and, I feel sure, in the best interests of the schools of the county.

*WHY DO TEACHERS FAIL?*

JOHN BREBNER, SARNIA.

It will be necessary to have a clear idea of what the teachers should do before we can say whether he fails or succeeds. If he is merely trying to obtain a living by keeping school, and cares little whether or not men and women are developed under his tuition, his success or failure will be largely a personal matter, and he will feel that money is the measure of success. If, in addition to his desire for gain, he seeks popularity (and the salary often depends upon this), he will strive to be all things to all men, and the more he can pull the wool over the eyes of parents and trustees, the greater will be his success, and the less serious the results if he fails. But should he realize his responsibility, and the momentous consequences of his work to those placed under his care, and fail in his efforts, he will feel more keenly for the pupils than for himself.

Why have we teachers? To relieve parents from duties they have neither the time nor the qualifications to perform, is the chief end of the teacher. His function is not merely or chiefly to impart information, but to develop power and character. For the former he strives to cultivate the ability to think and to do. For the latter he aims at making men and women, in the fullest sense of these terms: human beings, capable and determined to do their duty to their fellow-men, to themselves and to their God, capable of enjoying every legitimate pleasure, and of contributing to the enjoyments of others. So far, then, as lies in his power, he tries to train all the faculties of the mind and body, and to cultivate all the amenities of the social system to which his pupils belong. Many fail to accomplish all they would like to do, and I understand that my duty to-day is, so far as my experience and observation enable me, to state the reasons for this failure.

Leaving out of the consideration of the question, instances in which the failure, or apparent failure, is caused by the interference of trustees or parents with the working of the school, and the want of proper applicances. I think four causes have to be considered:—

1. Lack of knowledge of the subjects to be taught.—Under our present system of licensing teachers, there should be very few who do not know as much of each subject as they are required to teach, in all the classes up to and including the Fourth

Form, but when they have to take Fifth Form work the case is changed, for many of the teachers, whose certificates are based upon primary standing, do not possess a sufficient knowledge of the facts and processes to make them safe guides for our Public School Leaving candidates. We claim that our teachers should know very much more ; should have a far wider range of knowledge of the subjects, than merely to be able to keep ahead of their pupils—in fact, should have broader culture and fuller information than is possessed by the great majority of them now.

Owing to the practice in our High Schools of accepting algebraic solutions of arithmetical problems, many of our younger teachers are far from being experts in arithmetic, and although they can solve by algebra for themselves, they cannot bring their processes down to the comprehension of their pupils.

Sometimes remarkable lessons are taught by people claiming to be "First Class teachers," or who had "just failed by a few marks of getting a First," e.g., a lesson on the literature of "The Burial of Moses;" "Moses returned to Egypt to have Pharoah go out into the desert to see the burning bush ;" "Mount Nebo is the same as Mount Sinai and is situated to the south east of the Red Sea," etc.

With the torrent of inexperience poured annually into our schools, and the low salaries, which have on account of the superabundant supply of teachers, become the rule, not the exception, those who know should not hesitate to proclaim that experience and knowledge, essentials of successful teaching, are wanting in many of our schools to-day, and those in authority should take steps to make it impossible that cheapness instead of efficiency should, as now, in scores of cases, be the desideratum in the engagement of the teacher.

2. Lack of Self-Control.—That we may be able to govern others we must first be able to govern ourselves. It matters not whether our want of self-control is shown by nervousness or outbursts of temper, for nothing pleases some children so much as to be able to "rattle" the teacher, and none notice more quickly, that the teacher has become so excited that he scarcely knows what he is doing. By such exhibitions teachers lose the confidence and respect of the children. Where the teacher is subject to uncontrollable passion, the pupils, from fear, may yield apparent obedience, for they are shrewd enough to read "the day's disaster in his morning face," and all but the most defiant will govern themselves accordingly. In no case can it be claimed that such pupils either do the best work possible, or that the characters formed are

what we desire to see exemplified in the life and conduct of our pupils. The causes of failure referred to above, will include most of the cases under this head, yet without being either timid and nervous, or over-bearing and tyrannical. Some teachers are unable to manage a school owing to a want of uniformity of treatment, for the same kind of conduct, good or bad. The teacher, who one day is severe and exacting, and the next will accept any kind of work or conduct, fails alike by his severity and by his leniency, for many children will run the risk of getting off, with indifferent preparation, should something more attractive take attention from lessons or the performance of work. If you are to be successful in governing children and moulding them to uniformly kind and considerate treatment of others, you must set an example worthy to be copied in your treatment of them. If you don't you will fail.

In some schools the most perfect control is exercised without any apparent effort, and not a word of reproof is heard, yet the scholars are ready to anticipate every wish of the teacher. A loving, kind word in private is better than all the nagging or scolding that could be done in the schoolroom from daylight to dark.

3. Lack of Resources or the tact to use them.—In all schools, and especially in primary classes, there should be continual change in the work and in the ways of doing it. Hence, the teacher who has a great variety of methods and is able to keep every one busy, profitably busy if possible, but in any case busy under the teacher's direction, has a power entirely unknown to one who is continually at his wit's end for something to keep the children out of mischief, who, though he can follow out the work by the timetable, with the classes in turn, is continually at a loss to know what to put the younger pupils at next, when he is not directly engaged with them.

The teacher who can act promptly and firmly, yet kindly and considerately in any emergency, and is able to use it to the strengthening of his influence in the school will never be forced to antagonize any pupil, or excite opposition for he will be able to carry the judgment of the pupil and of the school with him, in plans of work and discipline. He will present none but the best and highest inducements to effort. If possible he will train to a love of knowledge for its own sake and for the pleasure the pupils will feel in its acquisition. He will use every lawful motive and incentive to earnest persistent work and both by precept and example, cultivate habits of diligence and industry.

If the teacher by his want of tact, fails to cultivate habits of kindly intercourse between his pupils and himself, it will certainly be impossible to form these habits among his pupils. Though he may obtain earnest effort by encouraging emulation, he will not produce the type of citizens that we should seek to turn out of our educational factories, manly men, and loving gentle women, able to help and to sympathize with those in need of sympathy and help, yet ready to do and dare for the right. He will fail in the essential object of our schools, the development of a strong, well informed, capable people, fitted to enjoy, and trained to practice the duties and enjoy refining pleasures, but also qualified to endure in the stern struggles of life.

4. Lack of Conscience and Disregard of Consequences.—If a teacher has not a true sense of the responsibility of his office, his efforts will be directed to the keeping up of appearances, and although he may be popular and considered successful, by the community in which he lives, he is a failure.

Water cannot rise higher than its source, no more can the children under the charge of such a man or woman, be anything better than samples of pretense without reality. The teacher who feels that he is accountable not only to society, as represented by trustees, parents, and pupils, but above all to himself and to God, the man who sees in every child committed to his care the most precious raw material in the universe, the most momentous possibilities, both for this life and the life beyond, and feeling all this, goes on in prayerful dependence upon the grace given to those who seek it, is the one who can never fail.

That there is far too little appreciation of the serious nature of the office of the teacher, is evidenced by the conduct of many trustees. "Anybody can teach the little ones," appears to be their opinion, and therefore the cheapest teacher is the best. Parents are equally ignorant or indifferent, else they would insist on the engagement of experienced teachers of established character. They would often be found in consultation with the teacher, regarding their children, not only in reference to their work and progress, but also in reference to any tendencies of the child's conduct when beyond the purview of parents and home.

Instead of coming to the teacher for kind, friendly consultation, too often the only intercourse between the teacher and his patrons is when some irate parent comes to complain of some imaginary or real injustice done to his child by the teacher, or by a fellow pupil. In such cases the interview is seldom pleasant or pro-

fitable, yet, when teachers and parents are on intimate friendly terms, even such calls may be both.

The earnest conscientious teacher will be the first to move in the establishment of true relations with the parents of his pupils.

We conclude, therefore, that teachers sometimes fail for want of knowledge, sometimes for want of self-control, sometimes for want of tact, frequently for the want of conscientious, earnest conviction of their responsibility, and the paramount importance of their duty, but usually failure is the result of several of these causes combined.

As matters are now, with half of our schools in charge of minors, some of whom have neither manners, culture, nor established character, is it any wonder that the schools of Ontario are not what the friends of education would like to see them?

The wonder is that they are so good as they are. Nor can we expect much improvement until we can obtain experienced teachers of mature fixed character, and retain them by paying them living salaries, and some better assurance of fixity of office.

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*THE PRESENT STATUS OF TEACHERS' SUPER-ANNUATION.*

H. D. JOHNSON, I.P.S., STRATHROY.

The first provision for the superannuation of teachers in Ontario was made by the School Act of 1853, and regulations were passed by the Council of Public Instruction in 1854. These provided that no teacher should receive a pension who should fail to contribute \$4 per annum to the Fund while engaged in teaching, and further, that no teacher should be eligible to receive a pension who had not become disabled for further service while teaching. It was also understood that all persons applying for aid should be in indigent circumstances, and that no more than the Legislative Grant and contributions to the Fund for the years should be distributed, and that pro rata.

The Legislative Grant and contributions to the Fund were so meagre that in 1871 the payment to beneficiaries was only at the rate of \$2 per annum for each year of service; in 1872 it was made \$4, and in 1873 the full rate of \$6 per annum was allowed.

The law for the compulsory payment to the Fund by male Public School teachers came in force in July, 1871. In the case of female teachers, the payment remained voluntary.

The law enacted that each male Public School teacher should contribute \$4 annually towards the Fund, and that the inspector under whom he served should deduct \$2 semi-annually from all grants payable through him to the teacher, and transmit the same to the Educational Department. It further enacted that teachers retiring from the profession should receive back one half of all sums paid into the Fund, and further, that on the decease of any teacher his legal representative should be entitled to receive back the full amount paid in by such teacher, with interest at seven per cent. per annum.

The Act of 1874 extended the provisions of the Act of 1871, so as to include all male Public School teachers whether they received any payments through the inspector or not. This enactment was intended to include the case of male Public School teachers engaged in the urban schools. This Act extended the provisions of the Act of 1871 so as to include the case of all female teachers and masters, and teachers engaged in High Schools. These were left free to contribute or not, but if they contributed they were to share in the benefits of the Fund.

The law made provisions for two classes of beneficiaries, (*a*) teachers that had reached the age of sixty years, (*b*) teachers that had become disabled in the profession before attaining the age of sixty. In both cases the allowance was to be \$6 per annum for each year of service. This allowance might be supplemented by any Municipal Council, Public or High School Board. In the same year an extra \$1 was added to the allowance in the case of holders of first or second class Provincial certificates, and to head masters of High Schools and Collegiate Institutes, for each year that they held such certificates or such positions. The retiring allowance was to cease at the close of the year of the recipient's death. In the case of a pensioner resuming his profession, his allowance was to be suspended from the time so engaged. If he superannuated again an additional allowance was to be given for his additional service.

In 1877 the law was amended so as to include inspectors of Public and High Schools, and they were placed on the same footing as teachers were by the Act of 1874. It also put the Minister of Education in place of the Chief Superintendent, and the Education Department for the Council of Public Instruction.

The Act of 1885 practically made provision for the closure of the Fund by enacting, (*a*) that only teachers and inspectors whose names were entered already on the list of contributors be in future permitted to pay into the Fund, (*b*) that all arrears be paid before the first day of July, 1886, in order to participate in the Fund, (*c*) that any contributor who desired to withdraw from the list was at liberty to do so on the same conditions as if he had retired from the profession.

The Act of 1886 relating to Separate Schools made the same provision as the Act of 1885.

No important change was introduced by the Act of 1887.

The only change made by the Act of 1891 was, that after a teacher or inspector had served for thirty-five years he might retire from the profession and still be entitled to superannuate on reaching the age of sixty.

The Departmental Regulations of 1892 enacted that payments on account of superannuation should commence with the year following that in which the applications were approved by the Education Department.

## BLANK FORMS OF APPLICATION, ETC.

After examining these forms carefully, the only objectionable feature that I have noticed in them occurs in Form 155. The part that I refer to is "or in any other employment or occupation." I understand the custom of the Department is to allow the applicant to strike these words out before signing the form.

I sent the following questions to forty-five inspectors and received answers from only thirty-two of them. I presume that the others had nothing to write about, as several, even of those that replied appeared to have little or no interest in the question :—

1. Are you in favor of an "experience limit" of twenty-five years as well as an "age limit" of sixty years, at which persons who cease to teach or to pursue some regular calling may superannuate ?
2. Do you favor some equitable basis of closure of claim to teachers who have taught twenty-one years ?
3. Can you mention any examples of injustice resulting under the present regulations ?
4. What changes would you recommend in the present regulations *re superannuation* ?

Twenty answered the first question, twenty-three the second, and seven the third, in the affirmative. The answers to the fourth were so varied that I could not summarize them, but I have used the valuable hints and suggestions that they contained, in the remaining part of this paper. I may add that I gathered from the answers to the fourth question by the consensus of opinions expressed, that all favored the recognition of the claim of teachers who had taught twenty-one years or over, and had contributed to the Fund, and who had retired voluntarily, or were driven out of the profession by younger teachers who were willing to teach for lower salaries.

There is no doubt but that the hope of having a pension during the last years of their life, kept not a few teachers in the profession that otherwise would have left it and tried some other calling where they could make provisions for old age. Having spent their best days and energies in teaching, they suddenly awoke to the painful fact that they were unfit for other callings, and that their only hope was to continue teaching and look to the pension to keep them during their declining years. Rightly or wrongly a large majority of the teachers after the inception of the superannuation scheme received the impression that if they continued in the profession till they became old

they would receive a pension. This was the general impression, that the provisions of the scheme made, not only on the mind of the average teacher, but also on the general public.

The contributors to the Fund were of two classes, (*a*) those who contributed voluntary, *i.e.*, female teachers and High School teachers, (*b*), those who were compelled to contribute to the Fund, *i.e.*, male Public School teachers. In the case of inspectors many of them were Public School teachers contributing to the Fund before they received their appointments. While I am free to admit that all who contributed to the Fund should be dealt with fairly by the Province when it was decided to legislate with a view to closing the scheme, I feel that the latter class have, if possible, the greater claim, as they had no choice in the matter, but had to pay their money to the Fund whether they approved of it or not. For this reason the Act of 1885 should have provided, that all persons withdrawing from the Fund would receive back their own with interest at seven per centum per annum. As it now stands, they only receive back half the sums paid, in and the balance is forfeited. This is manifestly unjust, as the money contributed by them to the Fund was as much theirs as any other part of their salary, and should have been returned to them as they did not share in the benefits of the Fund. There is still another reason why the whole with interest should be returned, namely, that as the law now stands if a contributor dies without withdrawing, his legal representative receives back all that he has paid in with interest at seven per cent. per annum. Thus in the case of two contributors, one withdraws before he dies, he receives back only half of what he has paid in, the other dies and his heirs recover back all that he has paid in with interest at seven per cent. per annum. Two examples will make this plainer: (1). When the payments were made for fifteen years, the one that withdraws gets back only \$30, the heirs of the other get back \$100.52. (2). When the payments were made for twenty-one years, the one that withdraws gets back only \$42, the heirs of the other gets \$179.46. I fail to see any valid reason why the heirs should be dealt with more generously than the contributor.

Section eighty-six (2) of the Act of 1896 makes the "experience limit" thirty-five years, at which a teacher may retire and still superannuate on reaching the age of sixty. In looking over the list of those who superannuated during the last seven years, I find that their average age was 55.7 years, and the average time taught by them twenty-six years, less than thirty-seven per cent. of them had

attained to the age of sixty or over before superannuating, and only 13.8 per cent. had taught thirty-five years or over.

From the above, as well as from the opinions expressed by the inspectors in their replies, it is plain to me that the "experience limit" should be lowered to twenty-five or thirty years. Besides, there are several contributors who continue to teach, under the existing regulations, in order to secure their superannuation allowance long after, in their own interest and in the interest of the schools, they ought to stop. This class, not knowing what else to turn their attention to to gain a livelihood, are willing to teach for almost any salary in order to complete their thirty-five years. If the "experience limit" were made twenty-five or thirty years this class of teachers would withdraw from the profession and the result, on the whole, would be beneficial, and no injustice would result, as a very small percentage of the beneficiaries reach the "experience limit" anyhow.

Section eighty-four (6) of the Departmental regulations of 1892, states that "payments on account of superannuation commence with the year following that in which applications were approved by the Education Department." This seems to be somewhat unfair, as it takes some time to prepare the applications and get the necessary certificates filled out. If this Regulation were amended so that the payment would begin with the year in which the application was made (if approved) it would be more in harmony with the spirit of the law which aims at giving aid during the disability of the contributor.

In the case of a person who has contributed for forty years and then superannuated, he retires with a pension of \$280 a year. What he has paid into the Fund, with interest, amounts to \$800. Should he die after receiving only one payment, he loses \$520, in such cases the heirs ought to receive back all to the credit of the beneficiary above that which he has received.

As to any plan for the closure of the Fund, I have examined the question, and, looking at it casually, it would seem to be easy to formulate a scheme that would be just to all parties concerned, yet the more I examined it the more it appeared impracticable.

There are three classes interested in such a scheme: (*a*) contributors that became disabled while teaching before reaching sixty; (*b*) contributors that have reached the age of sixty; (*c*) and contributors that have taught over twenty-one years, and are still healthy, but cannot get schools at any reasonable salaries, and have at least a moral claim on the Fund to which they have contributed, if not a legal one.

As to the first class there is no way of extinguishing their claim, from the very nature of it, as it would be impossible to determine their "expectation of life," besides, their claim is only good while their health remains impaired.

In the case of the second class, the present arrangement is the best possible for them.

As regards the third class, if the "experience limit" were made twenty-one, or even twenty-five years, the difficulty would be easily solved by applying the provisions of section eighty-six (2) to them. Or their claims might be extinguished by paying them a lump sum based on the pension they would be entitled to if they were disabled in their "expectation of life." For example, a person taught twenty-one years, and was forty-five years of age. His pension would be \$143 and his "expectation of life" twenty-four years. The present value of his pension, at four per cent., is \$2,180, and if we allow him twenty-one thirty-fifths of this to extinguish his claim, he would get about \$1,308.

The pay list appears to have attained its maximum in 1889, before that it shows a yearly increase, after that a decrease.

After reading the various replies from the inspectors, and examining the case carefully, I have come to the conclusion that the present law and regulations *re* superannuation give general satisfaction, and that if the law were modified, as I have already pointed out, especially section eighty-six (2), so as to make the "experience limit" twenty-five or even of thirty years, nearly all the real or supposed cases of hardship in connection with the scheme would disappear.

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## TRUSTEES' DEPARTMENT.

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### CHAIRMAN'S ADDRESS.

JAMES H. BURRITT, B.A., PEMBROKE.

(*Synopsis of his paper on "Our System of Departmental Examinations."*)

The points emphasized were, that the examination part would seem to soon overshadow the teaching part of our school work. Whether this is wise, or whether the complaint that the examinations cost too much, is well founded, it is necessary that these examinations should be conducted with such efficiency and accuracy, that the pupils, parents and trustees may have every confidence in the results. That confidence is not now widespread. When you find that in 1896 out of 13,220 pupils who wrote for the Departmental and Matriculation examinations, 9,934 failed to pass, and that all of these were, in a sense, mature pupils, who had been, at least, two years in the High School before trying the Primory, and at least one year more before trying the Junior leaving or Matriculation, and the darkness which apparently hangs over the procedure in appeal, and where in 1896, of the 1,021 who appealed, only 182 were successful, there is cause for a demand, that in the matter of appeals at all events, the procedure should be a matter of public notoriety, and the appellant given a fair chance of being heard.

The Public Accounts of Ontario for 1896, pages 135 and 137, disclose that of the fourteen members of the Appellate Board, ten were on the Board of Examiners in the first instance: and on page 105 of the Report of the Minister of Education for 1896 it is stated as follows:—"In the case of candidates that appeal the examiners for (a) and (b) (Forms 1, 2, 3, 4, in the High School) shall read the appeal papers of such candidates, and report their finding in each case without delay." An appellant has a right to have his case heard by those who had no part or doing in the original hearing.

A Magistrate or Judge who hears a case and pronounces judgment therein, cannot sit upon the case in appeal, and the wisdom of the law is indisputable, and there is nothing singular nor exceptional in these

departmental examinations or in appeal therefrom to warrant a different rule. The Appellate Board should be a permanent body, appointed by the Lieutenant-Governor in Council.

An appellant should have the opportunity afforded him of appearing either personally or by some competent representative before this tribunal. In order to enable him to do this, let the Department, when an appeal is made, stamp with its seal, all the answer papers of the appellant on which the appeal is based, and send them in a registered letter to the head master of the High School where the appellant wrote; the head master to be responsible, under penalty, for the safe keeping and return of the papers: no one to have access to such papers except the head master, the appellant and the teacher of the subject of the paper. The head master or the teacher, as the case may be, to enter on a separate form (sent from the Department for that purpose) his objections to the marks awarded by the examiner, and add such remarks as might be pertinent to the matter. The answer papers and the objections to be returned within a specified time to the Department, and both to be submitted to the Board of Appeal. This plan affords absolute security against fraud or mistake of any kind regarding papers, and gives the appellant a fair chance of pleading his case before the appeal board. Human nature is the same in an examiner as it is in the same man when he is a judge in appeal, and he is not likely to pass a pupil to-day who was plucked yesterday.

#### RELIGIOUS INSTRUCTION IN PUBLIC SCHOOLS.

This question has been before the public of Ontario for some time, mainly as an issue political, because of the Manitoba School controversy, respecting the alleged rights and claims of the Roman Catholic Minority in that Province.

If the matter had its limitation in that controversy, I would not have considered it necessary or proper to make it a subject to be noticed by this Association; but it has assumed a wider form, and our Roman Catholic brethren have Protestant friends in Ontario who are thinking along their lines and have already approached the Hon. the Minister of Education, memorializing him to introduce religious instruction into our public schools. The matter then becomes more than a political question, and is one that is before the Government and the people for a solution, and it is pertinent to our functions to-day, as trustees, representing the parents and taxpayers of Ontario, and assembled to deal with matters affecting the welfare and advancement

of our school system, to view the question wholly apart from its political effect, and by our decision, to aid the Minister of Education in coming to a correct conclusion in the matter referred to him for action. The minister, in consequence of such requests, issued a circular to the Inspectors of Public Schools of Ontario, and amongst the questions asked for their opinion was "whether it would be advisable to authorize teachers to give direct religious instruction by the exposition of scripture lessons." Of the sixty-four inspectors whose replies can be found in the Report of the Minister of Education for the year 1896, just laid before the legislature, fifty-three emphatically "No," six are doubtful in their answers, and only five favor such instruction, and of the five one confounds morality with religion, for he says, "religious instruction should be given, a small text book on morals should be prepared and regularly taught," and one other of the five is a French Canadian.

These Inspectors are men of education, and necessarily deep thinkers along the educational line, many of them in harness for over a quarter of a century. They give no uncertain sound; most of their answers are dogmatic, it is true, but it is remarkable that their reasonings to a conclusion have been so uniform. A few do expand, and one particularly covers the ground so effectually that I give his answers as follows:—"It is my deliberate conviction that it would be fatal to authorize teachers to give religious instruction by the exposition of the scripture lessons. Amongst other reasons which almost lie on the surface are (1) it is quite conceivable that a teacher, who was an agnostic or more, would have the means laid ready to hand for inculcating his views, and it might be difficult to bring home and prove any charge. (2). The majority of teachers, being young and very badly taught on religious subjects, could not teach what they themselves did not know, and many of their expositions would be more originally *bizarre* than orthodox. (3). Those who have studied such questions so as to be able to teach them, would necessarily be those who had felt deeply, who had, in consequence attached themselves to some religious body, and who might be expected to give undue, though perfectly honest prominence to their particular shibboleths. In fact such schools would inevitably be the scenes of real or supposed proselytising, with the *odium theologicum* as the net resultant, and this would produce (4) a rivalry among the different religious bodies as to which should be sufficiently in the ascendancy to be able to engage a teacher of its own persuasion. There is already too much of this sort of thing, in some places the teacher's creed and

not his capacity as an instructor, secures him his appointment, a condition of things, I need scarcely say, fatal to the well-being of any school or neighborhood." In its practical bearing and conclusions, the opinion of this Inspector is a sermon in itself, and covers the ground so completely and truthfully, as all of you must admit, as to leave nothing else on this "advisability" side of the question to be said. Our teachers would have to be ecclesiastics without any sectarian leanings, a condition of things not to be looked for this side of Edward Bellamy's Elysium.

There are other sides, however, quite as crucial: one practical, one fundamental. The practical one, is, as you know, the present state of the public school time table and curriculum. They are as full now as anybody could wish for, and contain the absolute essentials and material to give the children an education helpful and necessary in fighting life's battle, and the education for which we are all struggling. It goes without saying that the children as men, in this life's battle, will not succeed by their expert knowledge of the scriptures or of the thirty-nine articles, confession of faith or the various catechisms of the various other denominations, and if this religious exposition is to be forced in, something essential must be forced out, and the child leaves the school imperfectly equipped for fighting his way in this world, and questionably prepared for his journey in the other. This naturally leads up to the other and fundamental side of the question, what is the state's duty in the matter? but before referring to that feature, allow me to point out regulation 100, which allows the clergyman of any denomination to give religious instruction to the children of his church, at least once a week after school hours, thus preserving the system from the accusation made, of being a "godless" one, throwing the onus upon the clergyman to be zealous on behalf of the flock, upon which, the opinions of the inspectors referred to, form a humorous commentary.

Now what is the state's duty in the matter? First, its right to educate at all, then what has it a right to teach, and further whether morality can be taught apart from religion. If, for example, I have no children, why should the state take money out of my pocket for the schooling of the children of my neighbour? By the same right, if right it be, why should I not be called upon to pay for the clothes of those same children? Such grounds have been taken by the opponents of free or National schools.

If Government is to exist at all, that right must carry with it such

functions as are necessary to its very existence, and this depends upon the nature and constitution of the state.

Louis XIV. could explain "*L' etat c'est moi*," in that case only Louis XIV. need be educated. But in our country, each individual is practically a Louis XIV., his education and virtue, or his ignorance and vice (not his theological opinion) mean the life or death of the state, *i.e.*, each voter must be as intelligent and virtuous as possible. Lord Bacon was no atheist, neither did he ever appear as its defender. No man ever looked with clearer eyes over the field of the rise, growth and decay of states. His opinion, then, as to the comparative results of religious meddling with the state is worthy of regard. He says:— "Atheism leaves man to sense, to philosophy, to natural piety, to laws, to reputation, all which may be guides to an outward moral virtue, though religion were not, but superstition dismounts all these and erecteth an absolute monarchy in the minds of men; therefore atheism did never perturb states, for it makes men weary of themselves as looking no further, and we see the times inclined to atheism (as the times of Augustus Caesar) were civil times, but superstition hath been the confusion of many states. In all superstition, wise men follow fools (Essay XVII. on superstition). No careful and unbiased student of history can fail to see that the religious control of states has always been a curse, both to the state and the religion as well. And it is perfectly plain that it must be. Why? For the reason that the end and aim of the two are diverse and often contradictory. The state exists for one thing, religion for another. It is no question as to which is more important, it is only that their aims and methods ought not to be the same. Religion concerns the relation in which the soul stands to God, and the one great historic aim of the Christian church has always been to secure salvation of the soul in the future life. Whose business is it to see to the welfare of the soul? Lord Salisbury lately said on a much similar question, "The parent has an inalienable right to determine the religious teaching his child should receive." I say, it is the individual's business, surely. No man has any right to impose so important a task on any other, even were it not absurd to suppose that anybody else could attend to it. And the surdest of all possible claims would be to make soul-saving a function of the state. Whatever narrow limits to state action any man, not a communist would set up, it seems to me as though all reasonable men might agree in limiting the jurisdiction of the state, at least, to this planet.

It must always be to me an interesting question as to what my con-

dition is to be in the next world, but it is simply none of the state's business. If I choose to make some region lower than Heaven my abode after I leave this earth, it is none of the business of the Government, nor of the Minister of Education acting in their, or his, official capacity. The Premier or Minister of Education as a private person, may do what he pleases in his private capacity to influence my religious convictions, but the use of official power can only make me a hypocrite or martyr, and in either case the "help" is not very apparent. The state has a right to see that my actions as a citizen, and as pertaining to this world, the only world over which it has any jurisdiction, shall not interfere with the equal rights of other citizens, and there its function ends. What has the state the right to teach in the Public Schools? The one great concern in this province, in the matter of education, is that each citizen shall be self-supporting, not a public burden; shall be sufficiently taught to be able to vote intelligently, not to endanger the province by ignorance; to be trained to a knowledge of the fundamental principles of right and wrong, so that if he violates his special duties, he cannot say he knew no better. It is not essential to the state that the school should do the work of the nursery, nor of the church, nor of the Sunday school. Those who are demanding the teaching of religion in the schools, inferentially urge that morality cannot be taught apart from religious dogma or authority. The Roman Catholic Church asserts this as a fact, and fortunately I have been able to secure the views of two men whose honesty will not be gainsaid. W. S. Lilly, an Englishman, one of the most brilliant essayists of this age, and a devout Roman Catholic, in an essay on the "ethics of marriage," written in 1890, says the great principles of human conduct, of ethics, are separable from, and independent of both the institutions and dogmas of any religion. He says further, "The moral law is ascertained, not from the announcement of prophets, apostles, evangelists, but from the natural and permanent revelation of the reason; that it is not an appendage to a set of theological mysteries, it is independent of these mysteries and would subsist to all eternity, though all religions were swept into oblivion." Suarez was a noted Jesuit, and a recognized Catholic authority. In his great work "de legibus," he says:—"Natural reason indicates what is in itself good or bad for men; the great fundamental truths of ethics are necessary like the great fundamental truths of mathematics: they do not proceed from the arbitrary will of God, they are unchangeable, even by his fiat. The moral precepts of Christianity do not derive their value from the Christian religion, it is a mere matter of fact

patent to every one who will look into the Bible, that Jesus Christ and His apostles left no code of ethics;" so much for Suarez. The moral of the sermon on the mount has been in the world thousands of years before our Saviour came upon the earth.

The fundamental principle of ethics, or of morality, to use a plainer term, can be and are formulated in our text books, and that they shall be so, until a further revision of the school law at any rate, is evidenced by the regulations, and further care has been taken under section seventy-six of the Public School Act of 1896, that the teacher of every public school shall teach faithfully and diligently all the subjects in the public school course of study, to inculcate by precept and example, *respect* for religion and the principles of Christian morality, and the highest regard for truth, justice, love of country, humanity, benevolence, sobriety, industry, frugality, purity, temperance and all other virtues." Surely then, it is absurd to say these things cannot be taught except as they are mixed up with a whole host of other things that even the Catholic authorities quoted, assure us had nothing to do with their origin. Our schools, then, are not "Godless." If God has left this world and shut Himself up exclusively in the creeds and formularies of the churches, then the charge is true, but if he is really "in and through all things," then all study is dealing with God face to face. As an eminent living divine has said, "I believe God is present and active in street, dust and star, in all the wonders of His worlds and the laws in accord, with which flowers unfold as well as solar systems grow, in all development of humanity, in social, in political, in industrial changes as well as in the moral and religious revelations of Himself to man."

I would then, in conclusion, say the bringing in of religious instruction and the exposition of the scriptures by the teacher, will be a step by the state out of its legitimate function, and the result will inevitably be an exposition coloured by the sectarian learnings of the teacher, and the last end of the schools will be worse than the first.

I would, therefore, recommend that the Minister of Education be memorialized to leave the law regarding religious instruction as it is.

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*MANUAL TRAINING IN THE PUBLIC SCHOOLS.*

GEO. Y. CHOWN, B.A., KINGSTON.

The increase in the population of our cities and towns and the resulting difference in the life and habits of the people, and especially of those attending school, makes it desirable that we should consider whether our present educational methods are all that are required, or whether, with the gradual drawing away of large numbers of our pupils from the close touch with nature and the active pursuits of the farm, there is not a necessity for adding to our school training some part of that activity and closer touch with things which has been lost.

This idea of developing the pupils through their activities as well as by their powers of aequisition is not a new one. It has been a theme with educational writers from Luther and Comenius down to the present time, and there are to be found frequent passages recognizing the value of manual training. Rousseau would have Emile learn a trade, Pestalozzi introduced it in his school for poor children, Locke pointed out the practical advantages to be gained from manual work for boys which were:—the promotion of bodily health by exercise, and the mental relaxation brought about by change of employment, but Froebel first put forth the claim for manual training as an essential factor in the education of the child. Briefly stated, his doctrine is that the human mind is creative as well as aquisitive; that the child's mind cannot be developed according to the laws of its growth, unless the creative activities be brought under systematic training in at least equal measure with the aquisitive powers; and that both disciplines should be continuous from the earliest to the latest stage of education. A scheme of education which concerns itself with the aquisitive powers merely, and this has been the usual scheme of the schools hitherto, is fatally one-sided and partial. For in his own language "Man is developed and cultured toward the fulfilment of his destiny and mission, and is to be valued, even in boyhood, not only by what he receives and absorbs from without but much more by what he puts out and unfolds from himself. Experience and history too, teach that men truly and effectively promote human welfare much more by what they put forth from themselves than by what they have acquired."

Every one knows that those who truly teach gain steadily in knowledge and insight; similarly, everyone knows, for nature herself teaches this, that the use of a force enhances and intensifies the power. Again, to learn a thing in life and through doing is much more developing, cultivating and strengthening, than to learn it merely through the verbal communications of ideas."

These ideas of Froebel have led to the formation of the Kindergarten, and have permeated the instruction therein, but they have done much more, they have permeated the educational thought of Belgium, Sweden, Norway, Russia, France, Holland, Denmark and Germany so that in each of these countries some form of manual training is part of the school system.

The educational value of manual training and the reasons for its early introduction into our school system have been so well brought out by Thos. W. Baillet, that I condense his admirable paper:

"The human brain is a double organ, the right half being in communication mainly with the left half of the body, and the left half of it mainly with the right half of the body. Each half consists of an outer layer composed largely of nerve cells, and an inner substance consisting of nerve fibers. It is the function of the cells to generate nerve energy and of the fibers to conduct it. These cells, although all present at birth, require a long process of development before they reach that stage of maturity which enables them to function. The power and efficiency of the human brain depend not so much on the absolute number of cells present at birth as upon the number which are afterwards developed to the point where they may be functionally active. This is mainly a matter of nutrition, of hygiene, and of education, in the broadest sense of the term. It follows from this that actual brain power is less dependent on mere size and weight of the brain than on its thorough organization. It also follows as a corollary that the schools have it in their power, in effect, to 'furnish brains' to pupils, if they develop into functional activity cells which otherwise would have lain forever dormant.

"The cells of the brain which we need especially to consider in connection with manual training are of two classes—sensory and motor. The sensory cells receive the different impulses which come from special senses, and those which come from the skin and the internal organs of the body. The motor cells generate the nerve energy which causes the muscles to contract.

"It is a striking fact that the area in the brain for the arm and hand is very much larger than the area controlling any other portion

of the body of equal size, except the face. This seems to be due to the fact that it requires a very large number of cells to effect the fine adjustments and delicate co-ordinations of the muscles of the hand in its infinite variety of movements.

"Nerve cells grow and develop like any other part of the body—through nutrition and functional activity. The visual cells develop through seeing, the auditory cells through hearing, and so with the rest. The visual area in persons born blind or blinded in early life, remains in a rudimentary condition through life.

"From this it follows that the exercise of the special senses is necessary for the proper physical growth of the brain. It also follows that sense training, in so far as it is physical process at all, consists not in training the external sense organs, but in developing their brain centres.

"Several corollaries may be safely drawn from these truths. First, the brain has a motor significance as well as a sensory one. It is not only the organ of the mind, but also a battery in which is generated the nerve force that moves the body. In man, the size of the motor area in the brain depends far more on the complexity of the movements effected by a group of muscles, and on the fine co-ordination of these movements, than on the mere mass of muscles involved. Hence the motor significance of the brain in man remains great, although it is overshadowed by its function as the organ of sensation and of thought. Physical energy implies a good motor brain area. The man of energy must be a man of brains, no less really than the man of thought, and physical laziness implies a deficiency in the motor part of the brain. With the stolidity and stupidity of the savage there goes, also, his inveterate laziness.

"In the second place, it follows from what has been said, that the popular distinction between 'brain work' and 'manual work' is a false one. There is no form of manual labor which is not at the same time, to a greater or less extent, brain work. The difference between 'manual work' and 'intellectual work,' so far as the activity of the brain is concerned, is simply one of degree. Now, it might be argued that manual training is not necessary for the development of the motor centres in the brain, on the ground that gymnastics and outdoor physical exercises are quite adequate to accomplish it. The answer to this objection is the fact that gymnastics and physical exercise in general appeal almost exclusively to the fundamental muscles and their brain centres and rarely to the accessories. Nothing short of manual training will reach effectually the important

brain cells governing the fine motor adjustments of the muscles of the hand, as nothing short of actual speaking and actual singing can effectually develop the equally important brain cells governing the muscles of the vocal organs.

" But its purely physical effects on the brain, important as they are, do not constitute the most vital significance of manual training. To justify it solely as a peculiar kind of physical exercise would probably be as wide of the mark as to find the chief significance of alms-giving in the fact that the act of giving develops the muscles of the arm.

" What does manual training contribute to the development of the mind? Light strikes the retina of the eye and the impression is conveyed to the visual cells of the brain, where a sensation of color is produced. These cells, after having been stimulated many times, acquire the power of reproducing these sensations in the form of ideas. These ideas are analysed, compared, put together in new combinations, and finally become part of the mind's organized body of knowledge. (Impressions of sound are received in like manner through the ear, and the sensations which they produce are developed into ideas which finally become an integral part of thought). The products of the different senses furnish, in this way, the material out of which and by means of which the higher thoughts are developed.

" Can manual training make any similar contribution to the mind's fundamental or basal conceptions? When we move a part of the body we can feel the movement; and without the use of the sense of sight we can tell accurately the position of the part moved. We can tell by mere motor perception the exact posture of any part of the body even when it has been moved, not by our own will, but by an extraneous force. These motor percepts are developed into motor ideas, which, like ideas of light and tone, enter into the higher thought products and become a part of the warp and woof of the mind's organized body of knowledge—the only kind of knowledge which is power.

" Just as all the conceptions into which ideas of color enter must be imperfect, and all the thinking based on them inaccurate, if these ideas of color are not developed, or are entirely absent, as in the case of the congenitally blind, so all the conceptions into which motor ideas enter must be imperfect and the thinking based on them inaccurate, if these motor ideas are but vaguely developed.

" Motor ideas are developed by all forms of voluntary muscular movement with any part of the body—by ordinary work, by play, by gymnastics, and by manual training. All these are, therefore, means of motor training. But the large motor area in the brain, governing

the infinitely varied and complex movements of the hand, shows that this organ is by far the richest source of motor ideas, and especially that portion of it little appealed to in gymnastics or in ordinary, unskilled labor—namely, the five fingers and their many sensitive muscles and joints. The hand is, therefore, a special sense organ, somewhat like the eye and the ear, and an untrained hand is, in many respects, as unfortunate a limitation as an untrained eye or an untrained ear.

"The important truth becomes obvious that manual skill does not reside in the hand, but primarily in the brain and in the mind; that manual training is but another form of mental training, and that the hand is but a sixth sense—an additional avenue to the mind.

"To speak of an education which 'trains the mind and the hand,' is to show an utter misconception of the function of manual training. Well co-ordinated muscular movements of the body imply a well-organized brain, a brain with well developed motor functions. Imbecility affects muscular movements quite as much as it affects thought and speech, and the hand of the idiot is unable to acquire skill, not because it is imperfectly formed, but because the brain centres controlling it are so defective as to be unable to develop accurate motor ideas.

"Manual training exercises must be carefully graded. Motor ideas develop in a certain order, just as ideas of color and tone do. As, in developing ideas of color, we begin with the fundamental colors, and then pass on to the shades, tints and hues, so in manual training there are fundamental exercises which must precede those involving perceptions and complex motor adjustments.

"The nascent period for developing the various forms of manual skill is roughly estimated to extend from the age of about four to fourteen. During this period the brain centres which preside over the muscular movements of the hand develop into functional activity, and can attain a degree of efficiency, if properly trained, which it is impossible for them to reach at any later period of their life. In this fact is found the weightiest reason for connecting manual training not only with high schools, but also with the grades below the high school. If a boy cannot receive such training in school, he must either miss his opportunity for getting it during the period when he can develop the highest degree of skill, or must leave school before the age of fourteen, and neglect the education which comes from books.

"There will, no doubt, be a judgment day after death. Many people seem to dread it. But few realize that life is full of judgment days—

days after which it will forever be 'too late' to do certain things. Every one of these 'nascent periods' in the life of a maturing human being is a judgment which forever determines certain things vital to its character of life. A lost opportunity in early education is not merely a loss of time which can afterwards be made up, it is a loss as irrecoverable as youth itself.

"What does manual training accomplish in the way of developing moral character?

"In the first place it develops respect for manual labor in the minds of young people, and helps to eradicate the vicious notion that selling goods over a counter at \$5 a week is more genteel than laying bricks at \$3 per day.

"In the second place, whilst the manual training school does not aim to teach a boy a trade, it gives him a training which will enable him at once, on leaving school, to earn from \$1 to \$2 a day, and thus become self-dependent.

"In the third place, manual training creates sympathy for the laborer in those who do not earn their livelihood by manual labor. It establishes a bond of sympathy between laborers and employers of labor.

"In the fourth place, manual training helps effectively to develop habits of accuracy which are carried into other lines of work. This is the universal testimony of those in the best position to know.

"Much of our present school work divides knowing from doing, and often exaggerates the relative value of the former as compared with that of the latter. Examinations test knowing more than doing, and even university degrees are conferred on the basis of attainment in knowing rather than attainment in doing. This may be to a large extent unavoidable, but it is nevertheless unfortunate. The legitimate end of knowing is doing. Right thought, to remain healthy, must ultimately issue in right deed."

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*THE REMOVAL OF ARITHMETIC AND ENGLISH GRAMMAR FROM THE JUNIOR LEAVING EXAMINATION AND THE SUBSTITUTION THEREFOR OF AT LEAST TWO FOREIGN LANGUAGES.*

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My object in bringing this subject before the Trustees' Department is not so much for the purpose of expressing my own ideas on the matter as to hear the views of others who have considered the question.

It appears to me, however, that several injurious effects will follow the change.

I.—EFFECT UPON ENGLISH GRAMMAR AND ARITHMETIC.

In the first place, it seems to me, that in removing arithmetic and grammar from Form III. to Form II., the result will be that less proficiency will be attained in these very important subjects.

It may be said that the examinations in these subjects will be as difficult as heretofore, yet it remains a fact, that, on the average, Form II. pupils are younger and less mature in thought and judgment than those of Form III., consequently a paper that would be difficult for Form III. would be considered unfair for Form II., and, in the event of such a paper being set, so great an outcry would be raised that leniency would have to be shown. Hence the examinations in these subjects, to be fair to the average Form II. pupils, will have to be lowered to their range in thought and judgment.

It would seem but natural for the associate examiners to be more lenient in marking the papers of Form II. candidates than those of Form III., so that it will be impossible to keep up the high standard heretofore required of Form III. candidates in both arithmetic and grammar.

It has been argued, in favor of the change, that pupils study these subjects throughout their whole Public School course, and consequently do not require an extended High School course in them; but it is well known that these two subjects are the ones considered most difficult by the average entrance candidate, and are the chief plucking subjects in the Entrance Examinations. This would seem to indicate that

a thorough High School course in these subjects is absolutely necessary.

Arithmetic and grammar have not only been taken from the Form III. examinations and placed upon the Form II. work, but bonus subjects of 150 marks each have been added in Latin, French, German and Greek. This makes it possible for a candidate to secure his primary certificate with a very low percentage of marks in either arithmetic or grammar, or in both.

Thus it would appear that the effect of the change will be the degrading of these subjects so far as proficiency therein is concerned.

#### II.—EFFECT OF THE CHANGE UPON PUBLIC SCHOOLS.

Arithmetic and grammar are the two main subjects on the Public School course of studies and, as the vast majority of our public School pupils never reach the High School, it is very necessary that they should receive the best possible training in these branches.

I have already stated that arithmetic and grammar are the plucking subjects in the Entrance Examination. If the cause of this be—as many hold—owing to faulty teaching and immaturity of thought on the part of the teacher, the prospect for the future is certainly not encouraging, when our coming teachers will be receiving less training in these branches than those already in the work.

I believe it to be held by inspectors generally, that, in English grammar, even more than in arithmetic, if the teacher has not mastered the subject in his High School course he is never likely to do good work in this important branch of study.

It would therefore appear that, to be well equipped for his duties, a Public School teacher should have pursued a thorough course in arithmetic and English grammar, and have read widely in English literature. The change in the regulations affecting the former two subjects would seem to have prevented this.

Consequently the effect of the change upon the Public Schools would seem to be most injurious, since it will tend to put our schools in the hands of young and immature teachers who will be lacking in training in the most important of the Public School branches of study.

#### III.—EFFECT OF THE CHANGE UPON THE HIGH SCHOOLS.

The substitution of at least two foreign languages in the place of arithmetic and grammar is certain to have a very bad effect upon our High Schools, both in limiting the number of candidates in Forms III. and IV., and in impairing the organization of the schools.

The majority of High Schools throughout the province are attended by a large number of country pupils, the sons and daughters of farmers. Heretofore these pupils did not attend the High Schools immediately after passing their Entrance Examination, but continued their studies in the Public Schools for one and frequently two years. Then they came into the High Schools, and being already advanced in many of the subjects were admitted into Form II., and generally in a year secured their primary certificates. Then, in another year, they were able to secure junior leaving certificates, and were then fairly well equipped for their work as teachers.

Since at least two foreign languages are now compulsory for a junior leaving certificate, and as these pupils have no means of securing a knowledge of the languages in the Public Schools, they find themselves at the end of their primary course unable to go any farther. In many cases they cannot afford to spend two or three years at a High School to master the languages compulsory for a junior leaving certificate, so they enter the teaching profession with at least a year's less High School training than heretofore.

Then, again, candidates who have passed the Public School Leaving Examination are ready to take up the primary work, and, not having a start in the languages, they, too, content themselves with primary certificates.

In addition to the two classes of pupils already mentioned, there is the class who secure primary certificates from Public Schools where continuation classes are formed. They, in the majority of cases, having no knowledge of the languages, also go into the teaching profession upon securing their primary certificates. In the county from which I came fully twenty such certificates were secured in 1896, and in the rush for schools the salaries secured ranged from \$160 to \$225 per annum.

As a consequence of the cutting off of these three classes of pupils it would not be surprising if the smaller High Schools, that depend largely upon country pupils, find it impossible hereafter to continue the work of Forms III. and IV.

Thus it will be seen how the change cuts off the supply of pupils from the higher forms in the High Schools and at the same time throws our Public Schools into the control of immature primary teachers.

The change will also seriously affect the organization in our High Schools.

Entrance candidates, who desire to pursue a full High School

course, will find it necessary to begin the study of at least one if not two of the languages upon entering the High School. But I fail to see how a good foundation in the languages can be laid in Form I. where the pupils have before them a compulsory examination of *thirteen* subjects, not including the languages, and have to give three half-hour spaces per week to drill and calisthenics. Under these conditions adequate time cannot be devoted to the study of the languages.

Then if any Public School leaving candidates desire to study the languages, new classes will have to be formed for them in these subjects, since they will be too far advanced in the other subjects to enter Form I.

Moreover, some candidates who secure primary certificates in Public Schools where languages are not taught, may wish to secure junior leaving certificates or to matriculate into the University. For these, again, new classes in the languages will have to be formed in Form III., in addition to the regular classes in these studies.

It may be urged that the formation of these extra classes is not compulsory: but practically they are, for the schools with large staffs of teachers will form these extra classes, and the rest will have to do the same or lose these classes of pupils.

With all of these extra classes it will be impossible to frame a satisfactory time-table, and the general organization of our High Schools must suffer.

#### IV.—OTHER OBJECTIONS TO THE CHANGE.

Other objections to the change might be urged. From a financial standpoint, I believe, the High Schools will suffer. The attendance of country pupils will decrease, and with this decrease, fees will diminish, and maintenance grants will disappear.

Even in effecting the change an injustice was done these pupils who, in 1896, wrote under the old regulations, in charging them a fee of \$7.00 for writing on the same subjects for which the fee had formerly been \$5.00.

I do not propose to suggest any remedy, since I am informed that a special meeting of the High School principals, has been called for the purpose of suggesting some changes to the existing regulations, and I think that this Department would do well to co-operate with them in their efforts.

*THE CHARACTER OF THE TEACHER AS A FACTOR IN EDUCATION.*

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One of the most interesting and important features of the Annual Report of the Minister of Education for 1896, is that part which embraces the reports of the Public School Inspectors on the condition of the schools under their charge. In all the features that may be regarded as indicating an improvement in the moral tone of the school population of Ontario there is a singular unanimity in all the reports. While there are not a few features that are capable of improvement, there is, in the matter of obedience, courtesy, and gentleness, evidence of the refining influence of education, and there is a marked absence of those rougher scenes which characterized many of our schools a quarter of a century ago. There is much less resorting to force as a means of discipline in the school, and also much less of a resort to force in the settlement of the disputes that arise in the playground, so that corporal punishment and fighting are very much less frequent than they once were.

It is not a matter of surprise that in regard to the moral character of the teachers of Ontario the reports should also speak in very decided and hopeful tones. Unless these reports, which are confirmed by personal observation, are to be very largely discounted, we are safe in holding that the men and women to whom we have entrusted the education of the boys and girls of our province will compare very favorably, in point of character and individual ability, with any body of men and women in any of the walks of life. The standard of moral character that is set for our teachers is high, and there is no doubt that many acts that would pass without any special comment in other professions would not be tolerated in a teacher. A large percentage of our teachers are members of some branch of the Christian Church; many of them are engaged in active Christian work; and are regarded as intellectual and moral forces in their communities; cases of suspension for immorality are exceedingly rare; there is a very low percentage of tipplers, and very many of our male teachers are total abstainers. The day of the tippling teacher is passed, and no man or woman, whatever their intellectual gifts may be, can very long hold their position without at least an outward conformity to the recog-

nized standard of character. The teacher is expected to be a person of high character, and it is gratifying to note that, as a rule, this expectation is realized. We do not separate intellectual from moral qualifications, but regard both as essential, and we expect the teacher to exert a salutary influence upon the life and character of the pupils committed to his care. We can all endorse from our personal experience the reports of the inspectors, and have no reason to feel ashamed when the teaching profession is compared with any other profession in the land. Character is more and more recognized as having its value even in those callings in which it has not such a direct relation to the daily work as that of the teacher.

The importance of character as a factor in education will be apparent at once from a consideration of the real aim of education. Education is not the mere impartation of facts to the mind, nor has it to deal with the intellectual side of the nature alone. Its true aim is the harmonious development of all the powers, physical, intellectual, and moral. The ideal man is not the one developed on the physical side alone, or on the intellectual side alone, or even on the moral side alone, he is rather the man who, with a sound mind in a sound body, has all his powers under the control and direction of the moral nature. The state aims in our elaborate educational system to develop true manhood and womanhood, and to fit our boys and girls to discharge all the varied and important duties of citizenship in the social, the industrial and political spheres.

The man who is developed on the physical side alone may become a Sullivan or a Fitzsimmons ; the man who is developed on the intellectual side alone may become only a more clever scoundrel than he otherwise would have been; but the man who is to be of real use to society is the one who has been taught the important lesson of self-mastery, and whose powers are all under the control of the moral faculty. And in this great work of building up the raw material of childhood into industrious, law abiding, and conscientious citizens our schools are a very important factor. We would by no means ignore the work of the home, or of the church, but, unfortunately, the influence of many homes is not, by any means, what it should be, and the hold of the Sabbath-school upon many children is very slight, and only for a very short time in the week, while, under our compulsory system of education, all the children of the land are brought under the moulding influences of the schools for a longer or shorter period. The school cannot be expected to eradicate the effects of a bad heredity, or of a bad home environment, but it can counteract those hindrances to

a large extent, and there is no factor which more powerfully determines what shall be the character of the future citizens of this country than the character of the teachers who come so close to the young life of our children for several years during the most formative period of their existence. We demand that the clergyman, who has to deal for the most part with men and women who have come to years of understanding, and whose characters and modes of thinking are to a large extent fixed, shall be a man of high character, and that he shall in all the relations of life conduct himself as a Christian gentleman. His power to mould character lies not only in the words that he speaks but in the personality behind the message. A man of low ideals, or unworthy life, one who is the slave of any of the vulgar habits that might not excite comment in another, is surely a misplaced man in the pulpit. The message of such a man, however eloquent, is a travesty, and orthodoxy of life is surely as important as orthodoxy of creed. Is it any less important that the teachers in our Public and High Schools, who have to deal with our children at a time when their habits of thought and action are unformed, and when they are at that stage of their development when they are most easily influenced by those whom they regard as their intellectual superiors, shall be men and women of high ideals, and of pure and spotless life.

The true teacher, like the poet, "is born not made," and if one is essentially lacking in those personal qualities, which enables him to mould the character of another, no amount of academic training can bestow those qualities.

Our system demands that each teacher shall reach a certain academic standard, and the certificate, or degree, is an indication of a stated amount of intellectual culture, but it is not so easy to measure the personal qualities that will make a man a successful teacher of youth. It is not easy to apply any other standard that is evidenced by a regard for the moral and social properties. It is the merest truism to say that the teacher should be a lady or gentleman in the best sense of these words, and that not only in the school-room, but in the social circle they should adorn their high calling, and that their whole life should be such that their pupils may look up to them with respect. It is surely fatal to the influence of a teacher, no matter what may be his intellectual gifts, that, outside of the school-room, he should be known as a man of low tastes and low habits, and finding pleasure in the company of the ordinary man about town. Without discussing the rightness or wrongness of smoking and drinking, as things in themselves, the state of public sentiment is such, that these habits,

even if never carried to excess, are a distinct injury to a teacher's influence. The young boy knows that very many men do these things, but when they are done by the man who bears the imprimatur of his college or university, it is hard to convince him that they are no manly and desirable accomplishments. And it may be said, without any fear of contradiction, that when a man has gone to excess in these matters his usefulness is gone, and his influence for good is at an end. The man who is not master of himself cannot hope to be a master of others.

In such a country as ours, with a diversity of creeds, religious instruction in the schools is out of the question, nor can we regard it as a most desirable thing even if it were possible. The great moral principles that underly true character-building are not the monopoly of any theological system but are common to all. The most effective moral teaching is not that which is given in the way of direct didactics but that which comes from the example of a pure and clean life. The direct teaching which is not incarnated in a life is as a sounding brass and a tinkling cymbal. The unconscious influence of the teacher's life is more powerful for good than any amount of formal lecturing on morals. Given a man of good scholarship, with the faculty of arousing the intellectual interest of the pupil, and add to this a pure life and high and worthy ideals, and you have a teacher whose value far transcends the pittance which many a teacher receives. In my own town we have a teacher who has occupied his position for fifteen years, and who has not only been most successful, as tested by the ordinary educational tests, but has stamped the influence of his personality upon successive generations of boys and girls who love and respect him, and revere him as one of the great moulding factors in their lives. And such men, we are pleased to believe, can be found in many places, who, perhaps, more than any other man in the community, are factors in the building up of true and worthy citizenship. We are all familiar with the far-reaching influence of Dr. Arnold, of Rugby, as the boys committed to his care. His strong, true personality made itself felt, and young lives were but as channels through which he made his influence felt in the life of England. Perhaps no man in modern times had a stronger hold upon the thinking young men of Scotland than the late Prof. Henry Drummond, and used that hold for more worthy ends. And the secret of his far-reaching influence lay, not alone in his scholarship, or in the originality of his thought, but it lay also in his pure, winning and high-souled personality. The teacher who can enter

into sympathetic contact with boy-life, and can hold up high and noble ideals before them, and awaken in them noble ambitions, who can instil true ideas of manliness, and create a public sentiment that will frown down every form of meanness and dishonesty and bullying, is a treasure to a school, whose price is above rubies, and such a man should not be allowed to pass from the school because of any paltry considerations of financial savings. The Hon. the Minister of Education has said, and to the statement we can say a hearty Amen :— “ While intellectual power and acumen contribute to the development of the highest citizenship, it is beyond question that the forces which lie at the basis of the best and strongest character are moral and religious.” The man who can succeed in kindling in the breasts of his pupils high ideals of the responsibilities of citizenship, and of their relations to God and to their fellow-men, has reared a monument more enduring than brass, and that shall outlast the pyramids of kings.

Without at all assuming the role of a preacher or a lecturer on ethics, the true teacher has abundant indirect opportunities in the teaching of history, and the analysis of different characters that have figured in the public eye, as well as in the teaching of our well selected literature, to implant great seeds of truth that shall spring up and bear fruit at no distant day. The whole of the daily routine of the school work also affords opportunities for the cultivation of those habits that underlie true success in life. Even if a man be entirely free from all the grosser forms of immorality, if he be slovenly in his dress and in his personal habits; if he is lacking in the power of self-control; if he be lacking in promptness and punctuality; or if he be weak in discipline, the infection will soon spread throughout the whole school. Tennyson said :—

“ As the man is, so the wife is, thou are wedded to a clown,  
And the grossness of his nature will have weight to drag thee down.”

We may also say, “as the principal is, so the school is,” and while every teacher on the staff has his share of responsibility for the efficient working of the school, it is the principal, who, more than any other, stamps the impress of his personality upon it. The great value of a good education lies not so much in the facts that are stored up in the memory, or in the knowledge that is gained, as in the habits of industry, and application, and prompt and cheerful obedience, and punctuality, and usefulnesss, that are developed in a well regulated school. These things are the foundations of success in life, and while the boy may forget many of the facts that he has

learned, and while much of his knowledge may not come into the actual work of his life, if these habits have been wrought into the fibre of his being he cannot be a failure in any walk of life.

I am glad, gentlemen, to be a trustee, and to have any part, however humble, in the great educational work of our country. I am glad that we have a Trustees' Association in which we may meet together and discuss matters pertaining to our educational system. I am glad, too, that more public interest is being taken in the character of the men who are appointed on our trustee boards. On the school board to which I have the honor to belong there are four graduates of the University of Toronto, one ex-teacher, who is the police magistrate of the town, and one who has just graduated from the Mayor's chair. The work of the trustee in selecting those who shall control the educational destinies of our children, and who should be regarded by the teachers as their friends and advisers and helpers, is much more important than simply providing the sinews of war. It is no light task to select from among a number of applicants those to whom the school shall be entrusted. The choice of a teacher by a wise board will not be determined by intellectual qualifications alone, nor by financial considerations, nor will it allow itself to be swayed by such petty considerations as the denominational affiliation of the applicant, but it will endeavor to secure the very best possible man for the position. And to judge of the moral qualifications of a teacher is, perhaps, one of the most difficult tasks which a board has to perform. And, as my last word, I would make a strong plea for absolute honesty in the matter of testimonials. No board that is true to itself will recommend a man of questionable repute. By demanding a high type of character, and by strict honesty in testimonials, the few unworthy teachers will be speedily eliminated, and the character of the men and women who have their guiding hand upon the young life of the country will be all that we could wish it to be. And when the right man is secured the relation should be more than a merely a financial one, and no small considerations of mere saving should be allowed to deprive a community of the services of one whose work shall tell upon the entire life of those committed to his care.

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*HAS NOT THE TIME COME WHEN A LITERARY QUALIFICATION SHOULD BE REQUIRED OF SCHOOL TRUSTEES, ESPECIALLY HIGH SCHOOL TRUSTEES?*

W. T. WILKINS, B.A., TRENTON.

I presume that my having to read a paper, in opening the discussion on the subject assigned a place on the programme for the present hour, is the penalty I have to pay for rashness in suggesting a topic. Had I known that such punishment was to be meted out to my inquisitiveness, I think I would have refrained from putting the question :—"Has not the time come when a literary qualification should be required of school trustees, and especially of high school trustees?"

If such a question is to be discussed, the most fitting place for the thorough discussion of it is, undoubtedly, in this department of the Ontario Educational Association. That at least some literary qualification in school trustees is a *desideratum* we find asserted, directly or indirectly, from time to time on every hand by those who write or speak of the practical working out of our school system in the Public School sections and High School districts throughout the Province.

Most frequently, perhaps, the reference to the matter comes in the form of a sneer or inuendo as to the illiteracy, or alleged illiteracy, of *some* school trustees.

While bowing to the decision of those who imposed upon me the task of opening the discussion this afternoon, I beg leave to state, on the very threshold, that I have no such strong convictions as to the need of any radical change as might fit me to be the prophet of a new order of things as regards the organization of our school boards and boards of education. Were it possible to have these hereafter constituted wholly of graduates of our universities, or chiefly of those who have followed teaching as a profession, I would deprecate such a change as not less injurious, in some respects, than even the most extreme illiteracy ever alleged to have existed among the trustees of any school section heretofore. We don't want more professionalism on our school boards. The other departments of the Ontario Educational Association will furnish enough of that.

The highest authority on the subject in this Province states that \$2,500,000 per annum is a fair average of what has been spent on the

Public and High Schools of Ontario, and that of this sum the government contributes about \$250,000 per annum. The School Act of 1851 left it optional with the municipalities to institute free schools, and levy taxes for their support, but since 1871 free schools have been compulsory.

We are well within the mark when we state that so far the people of Ontario have taxed themselves to the extent of \$60,000,000 for the support of free schools, and that these, both Public and High Schools, have been open to all for more than a quarter of a century.

The responsibility of seeing that from the expenditure of this vast sum the greatest possible good should accrue to the greatest number was largely devolved upon those who, during those years, have occupied the honorable, but oft times thankless, position of Public and High School Trustees.

There are probably not less than 20,000 persons to-day serving their country, without hope of fee or reward, but subject to many pains and penalties, as Public and High School Trustees; and as the *personnel* of few boards have not been subject to many changes during the last quarter of a century, we may safely say that not less than 100,000 of our fellow citizens have, at one time or another, served in the office of school trustee since the establishment of free schools in the Province of Ontario. Among so many, it would be too much to expect that there have not been some who have not *magnified their office*.

But, taken as a whole, I think it must be admitted that there is no class in the community that has given more unselfish, faithful, and efficient service than that which has been rendered by the school trustees. In the admirable paper read last year before this department by Mr. Burritt, on "Parents and Trustees"—the responsibility resting upon the school trustee, as he stands, to a certain extent, *in loco parentis*, were well presented. After the graphic sketch of the humorous side of the trustee's position, under our law, he concluded with certain statements that were heartily endorsed by the members of this department. Among them were the following:—"Still we all seem anxious to serve."

Why is it? Because all acknowledge the benefit of education, and consider it worthy of much voluntary effort.

"You may have observed, as I have, that as a rule the school boards contain more representative men than do our city or town councils—there is a charm about the work of a trustee that is not found in the grosser work of a common council. The ideal of the work he is to be engaged in is a higher one. \* \* \* We have a knowledge that we

are part of the machinery which is preparing the children of our country to take charge of the affairs of the country in all of its branches and departments, when we are no longer here to form part of that machinery. \* \* \* The trust is eagerly sought after and faithfully performed. \* \* \* I trust the office will never lose the charm it now has."

I, at any rate, heartily homolgate the views thus presented last year by Mr. Burritt. The question might arise, as we consider the school trustee as acting *in loco parentis*. Should not the rule, alleged by some to have existed with respect to membership in the greater and lesser Sanhedrims among the Jews, be applied to our school boards, viz., that those who aspire to a seat, *must have given hostages to society*, such as the married man and father of a family is represented to have given? But this does not fairly come up for discussion under the question, "has not the time come when a *literary* qualification should be required of school trustees, and especially of High School Trustees?"

The qualifications at present required of Public and High School Trustees, respectively—so far as defined by statute—are set forth in the Public School Act, 1896—for rural sections, in section 91, sub-section 2; and for Urban School Boards, in Section 53, sub-section 2. For High School Trustees, in the High School Act, 1896, Section 11, sub-section 1. I would not weary you by quoting that with which you are all, doubtless, familiar, but for purpose of reference, it is, perhaps, as well to have the clauses of the statute referred to before us. Section 9, sub-section 2 is as follows: "For every rural section there shall be three trustees, each of whom, in rotation, shall hold office for three years, and until his successor has been elected. The persons qualified to be elected trustees shall be such persons as are British subjects, and resident ratepayers, or farmer's sons, within the meaning of the *Municipal Act*, of the full age twenty-one years, not disqualified under this act."

Section 53, sub-section 2, is as follows: "Any ratepayer who is a British subject and a resident in the municipality, of the full age of twenty-one years, may be elected a Public School Trustee, and every trustee shall continue in office until his successor has been elected and the new board organized."

Section 11, sub-section 1 of the High Schools Act, 1896, is as follows: "Any ratepayer, twenty-one years of age, residing in the county or municipality in which the High School is situated, who is not a member of the municipal council of such municipality or

county, shall be qualified to serve as a High School Trustee or as a member of a board of education." The disqualifications referred to in the clause first above quoted, and elsewhere set forth, have no reference, as you are all aware, to literary attainments, and are, perhaps, often considered more honored in the breach than in the observance of them.

In the inception of our school system, such requirements as are set forth were doubtless all that could with prudence be demanded: and possibly, in rural sections, it would not be advisable that much more should be required even at the present day. But after free schools have been established for over a quarter of a century, and maintained by the expenditure of such a vast sum of money, it might reasonably be expected that the standard of literary qualification on the part of those who aspire to bear rule over them should be advanced.

We have scarcely yet reached the happy condition in which the regulations set forth by St. Paul in his first Epistle to Timothy, as those which should govern the election or appointment of Bishops, Presbyters, and Deacons can be applied to govern the election or appointment of school trustees; and yet, *mutatis mutandis*, it might not be a bad thing to attempt to apply some of them. At any rate, I have no hesitation in accepting, as applicable to the case of our school trustees, the principle he sets forth regarding those who had ministered well in the office of a Deacon, viz:—That they *had purchased for themselves a good degree*.

I would have no amendment to the Public or High School Acts, regarding a literary qualification in trustees, operate so as to exclude from service any who have acted as school trustees heretofore.

On our High School Boards and Boards of Education we have not a few who, though they never enjoyed the privilege of a High School education, are past masters in the work which falls to the school trustee. But as regards those who have not hitherto had their names on this *honor roll*, and especially the young men, for whose education facilities have been provided at such a cost, and who are crowding forward as aspirants for the position made honorable by those who have borne the heat and burden of the day, I would prescribe a literary qualification.

A good many clauses of the present acts are devoted to setting forth the duties of school trustees; but, as you are all aware, many of the most important duties, and those most difficult to discharge, cannot readily be set forth in detail in the clauses of a statute, *e.g.*, the duties of trustees as regards the employment of teachers the

supervision of their work, arbitrating between them and aggrieved parents, deciding as to the equipment necessary for the efficient working of the school, etc. For the success of our school system, it is essential that those on whom such important duties devolve, should be lovers of learning and friends of the cause of education.

The question suggests itself, seeing the sacrifices the country has made to provide facilities for the education of all its children, can any who have passed from childhood into manhood during the time our free Public and High Schools have been maintained, and who have not availed themselves fully of the privileges they offer, be considered lovers of learning, or friends of the cause of education ?

In our colleges and universities the tendency is to relegate their government as far as possible to their alumni, and this principle might safely be introduced as regards our Public and High Schools. In rural school sections, possibly, no change should be made, for the present at least, as regards the qualifications required of trustees, but as regard Urban School Boards, Boards of Education, and High School Boards, I am persuaded the time has come when a literary qualification should be required of those elected or appointed to serve on them.

*Festina lente* is recognized by those at the head of our Educational Department as a wise dictum ; and they have hitherto acted upon it in amending our school law.

There is not, therefore, much danger of their accepting any suggestion for a change too radical.

I content myself with indicating what I consider would be a safe minimum of qualification, viz.:—

For Urban School Boards, and for Public School Trustees on Boards of Education, it should be enacted :—That on and after a certain date no one who has not previously served in the office of School Trustee shall be eligible to election unless he has satisfactorily passed the Public School Leaving Examination or its equivalent.

For High School Boards, and for High School Trustees on Boards of Education That on and after the said date no one who has not previously served in the office of School Trustee shall be eligible to appointment unless he has at least passed the Primary Examination or its equivalent. Proof of possessing such literary qualification shall, in every such case, be furnished to the Board before the newly elected or appointed member takes his seat.





## APPENDIX.

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### LIST OF MEMBERS

OF THE

## *ONTARIO EDUCATIONAL ASSOCIATION.*

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1897-98.

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|                     |             |                       |             |
|---------------------|-------------|-----------------------|-------------|
| Abbott, F.          | Meadford    | Bolton, Miss E.       | Ottawa      |
| Addison, Miss M. E. | Stratford   | Bonis, H.             | Vienna      |
| Alexander, Robert   | Galt        | Bowditch, Miss F.     | Hamilton    |
| Allen, John         | Paris       | Boyd, S. J.           | Goderich    |
| Allen, T.           | Durham      | Brebner, John         | Sarnia      |
| Allward, James E.   | Reaboro     | Brenton, Miss C.      | London      |
| Amos, Walter        | Aurora      | Brown, J. A.          | Whitby      |
| Anderson, G. K.     | Windsor     | Brown, J. C.          | Peterboro   |
| Anderson, John      | Arthur      | Brown, J. R.          | Napanee     |
| Anderson, John A.   | Rossmore    | Brown, L.             | Leamington  |
| Armstrong, M. N.    | Orangeville | Brown, R. J.          | Beamsville  |
| Asman, H. O.        | Hamilton    | Brown, S. W.          | Dunnville   |
| Aylesworth, G. A.   | Newburgh    | Brown, W. H.          | Gravenhurst |
| Baker, A.           | Toronto     | Brown, Mrs. W. H.     | Gravenhurst |
| Ballard, W. H.      | Hamilton    | Brown, W. R.          | West Lake   |
| Balmer, Miss E.     | Toronto     | Bruce, E. W.          | Toronto     |
| Barber, Albert      | Brampton    | Bulmer, J. R.         | Hamilton    |
| Barber, Miss E. E.  | Port Rowan  | Burgess, —            | Owen Sound  |
| Barnes, Charles A.  | London      | Burns, S. W.          | Toronto     |
| Barr, Miss Janet    | Grimsby     | Burns, W. J.          | Caledonia   |
| Batten, A. C.       | Barrie      | Burritt, James H.     | Pembroke    |
| Beavly, A. W.       | Thorold     | Burt, A. H.           | Brantford   |
| Bell, A.            | Chatham     | Burwash, N.           | Toronto     |
| Bell, A. J.         | Toronto     | Cameron, J. H.        | Toronto     |
| Bennett, J.         | Toronto     | Campbell, Cassius     | Ottawa      |
| Bingeman, S. M.     | Harriston   | Campbell, James       | Forest      |
| Birchard, A. F.     | Beaverton   | Campbell, N. M.       | St. Thomas  |
| Birchard, I. J.     | Toronto     | Carnochan, Miss Janet | Niagara     |
| Blake, Miss E. J.   | Galt        | Carscadden, T.        | Galt        |
| Blakely, Miss Helen | Picton      | Carruthers, A.        | Toronto     |
| Blaney, R. J.       | Toronto     | Carson, W. J.         | London      |
| Bogart, T. G.       | Highgate    | Carter, Miss J. W.    | Elora       |

|                      |                  |                        |               |
|----------------------|------------------|------------------------|---------------|
| Chadwick, C. W.      | Toronto          | Dempsey, Miss          | Ottawa        |
| Chant, C. A.         | Toronto          | Dent, Miss L. N.       | Toronto       |
| Chapman, W. F.       | Toronto          | Dickinson, J. A.       | London        |
| Charles, Miss H.     | Goderich         | Dickson, J. D.         | Niagara       |
| Chase, Geo. A.       | Toronto          | Dix, David             | Woodbridge    |
| Chown, Geo. Y.       | Kingston         | Doan, Robert W.        | Toronto       |
| Christie, J. D.      | Simcoe           | Dow, John B.           | Whitby        |
| Clark, L. J.         | Toronto          | Duff, D.               | Jarvis        |
| Clarke, F. H.        | Orangeville      | Duff, Miss E.          | Toronto       |
| Clarke, J. C.        | Toronto          | Dunsmore, Thomas       | Strathroy     |
| Clendenning, W. S.   | Walkerton        | Durnin, C.             | Elora         |
| Cloutier, Victor     | Chatham          | Earngay, T. R.         | Georgetown    |
| Coates, D. H.        | Brantford        | Eldon, R. H.           | Toronto       |
| Coates, Robert       | Milton           | Elliot, J.             | Leamington    |
| Colbeck, F. C.       | Toronto Junction | Elliot, William        | Mitchell      |
| Cole, J. M.          | Aylmer           | Elliott, W. H.         | Hamilton      |
| Colling, James       | Lindsay          | Ellis, Miss A. H.      | Oshawa        |
| Conger, Miss Nina    | Picton           | Ellis, W. S.           | Kingston      |
| Conn, Henry          | Watford          | Embree, L. E.          | Toronto       |
| Connolly, J.         | Cornwall         | Evans, James           | Port Hope     |
| Connor, J. W.        | Berlin           | Evans, Miss M. K.      | Newmarket     |
| Cook, Miss Mary      | Strathroy        | Fallis, L. K.          | Elora         |
| Cooke, John A.       | Dunnville        | Farewell, J. E.        | Whitby        |
| Cormack, James       | Guelph           | Fenton, W. J.          | Brampton      |
| Coutts, R. D.        | Harriston        | Ferguson, W. C.        | London        |
| Coverdale, Miss M.   | Canfield         | Fessenden, C.          | Peterboro     |
| Cowley, R. H.        | Ottawa           | Field, J. M.           | Walkerton     |
| Crassweller, C. L.   | Essex            | Fitzgerald, Miss E. S. | Niagara Falls |
| Crawford, J. T.      | Hamilton         | Fletcher, W. H.        | Kingston      |
| Creasor, John        | Owen Sound       | Fletcher, Professor    | Toronto       |
| Cubitt, F.           | Bowmanville      | Follick, T. H.         | St. Mary's    |
| Cuddy, Loftus        | Strathroy        | Forbes, W. B.          | Markham       |
| Cull, J. W.          | Mitchell         | Foreman, Arthur        | Fulton        |
| Cunningham, John W.  | Stratford        | Fotheringham, D.       | Toronto       |
| Curley, Edith        | Oshawa           | Fraser, C. G.          | Toronto       |
| Currie, Miss L. N.   | Toronto          | Fraser, Geo. A.        | Hawkesville   |
| Currie, P. W.        | Niagara Falls    | Fraser, G. J.          | Woodstock     |
| Curry, Miss A. L.    | Guelph           | Freeman, J. A.         | Waterdown     |
| Dales, John N.       | Kingston         | Freeman, Mrs. J. A.    | Waterdown     |
| Davidson, J.         | Guelph           | Freer, B.              | Minden        |
| Davidson, J.         | Norwood          | Frost, F. H.           | Bowmanville   |
| Davidson, Miss S. G. | Peterboro        | Fry, F. D.             | Mitchell      |
| Davis, W. H.         | Hamilton         | Galloway, James        | Kingston      |
| Day, Miss            | Cobourg          | Gamble, Charles        | Attwood       |
| Deacon, James        | Lindsay          | Garvin, J. W.          | Peterboro     |
| Deacon, J. S.        | Milton           | Gibbard, A. H.         | Georgetown    |
| Dearness, John       | London           |                        |               |
| De-Lury, A. T.       | Toronto          |                        |               |

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|----------------------|----------------|-----------------------|----------------|
| Giffin, J. A.        | St. Catharines | Howard, E. S.         | Brampton       |
| Gillilan, J.         | Bowmanville    | Howell, W. B.         | Simeoe         |
| Gill, James          | Hamilton       | Hughes, Miss A. L.    | Midland        |
| Gillesly, Joseph     | Pontypool      | Hume, J. G.           | Toronto        |
| Glashan, J. C.       | Ottawa         |                       |                |
| Glover, Miss S.      | Aylmer         | Irwin, A. J.          | Ayr            |
| Godfrey, E. Y.       | Meadford       | Irwin, William        | Durham         |
| Goodwin, James       | Grimsby        |                       |                |
| Gordon, N.           | Orangeville    | Jackson, J. A.        | Iroquois       |
| Gould, I. J.         | Uxbridge       | Jackson, R.           | Elmira         |
| Graham, Miss Emma J. | Toronto        | Jenkins, R. S.        | Orangeville    |
| Graham, W. A.        | Ottawa         | Jenkins, W. H.        | Owen Sound     |
| Grainger, Miss B.    | Walkerton      | Jewett, A. E.         | Chatham        |
| Grant, B. D.         | Goderich       | Jewett, Mrs. A. E.    | Chatham        |
| Grant, Wilbur        | Toronto        | Johnson, H. D.        | Strathroy      |
| Gray, Henry          | Toronto        | Johnson, John         | Belleville     |
| Gray, R. A.          | London         | Jolliffe, O. J.       | Ottawa         |
| Greenlees, R. F.     | Picton         | Jones, G. M.          | Whitby         |
| Greenwood, W. J.     | Whitby         | Jones, Miss L. L.     | Toronto        |
| Greey, Miss          | Berlin         | Jordan, A. A.         | Meadford       |
| Groves, W. E.        | Toronto        |                       |                |
|                      |                | Keddie, Miss H. M.    | Oshawa         |
| Hall, Miss D. J.     | Peterboro      | Kelly, M. J.          | Brantford      |
| Hall, F. A.          | Perth          | Kent, H. A. E.        | Toronto        |
| Hall, Z. A.          | Preston        | Kerr, Miss A. C.      | Ottawa         |
| Hallett, W. J.       | Barrie         | Kerr, Andrew          | Bell's Corners |
| Hamilton, J. R.      | Brantford      | Kerr, C. S.           | Woodstock      |
| Hamilton, W. J.      | Cobourg        | Killins, Miss Ada     | Wiarton        |
| Hardy, E. A.         | Lindsay        | King, S. G.           | Arkwright      |
| Hare, J. J.          | Whitby         | Kinney, Robert        | Brockville     |
| Harlton, W. H.       | Toronto        | Kirkland, Thomas      | Toronto        |
| Harper, J. A.        | Guelph         | Kirkman, Mrs. Barbara | Seaforth       |
| Harper, P. H.        | Conestoga      | Klotz, Carl E.        | St. Catharines |
| Harrison, C. W.      | Grimsby        | Knight, J. H.         | Lindsay        |
| Hastings, Thomas     | Toronto        | Knowles, R. H.        | Hespeler       |
| Hawley, A. W.        | Trenton        | Knox, R. H.           | Iroquois       |
| Hay, John            | Cobourg        |                       |                |
| Henderson, A. G.     | Whitby         | Laidlaw, Miss J.      | London         |
| Henderson, Miss C    | London         | Lane, J. S.           | Morrisburg     |
| Henderson, J.        | St. Catharines | Lang, A. E.           | Napanee        |
| Hendry, W. J.        | Toronto        | Lawrence, S. A.       | Minden         |
| Hicks, R. W.         | Toronto        | Lees, Richard         | St. Thomas     |
| Hill, E. L.          | Guelph         | Leitch, John A.       | Brantford      |
| Hill, R. J.          | Dundas         | Lent, Miss A. C.      | Picton         |
| Hoag, J. P.          | Brantford      | Levan, I. M.          | Toronto        |
| Hogarth, J. W.       | Ailsa Craig    | Liddy, W. R.          | Port Dover     |
| Hogg, John           | Collingwood    | Linton, W.            | New Hamburg    |
| Hooper, W. H.        | Omemee         | Livingstone, Miss M.  | Forest         |

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|------------------------|-------------|----------------------|------------|
| Livingstone, J. D.     | Forest      | McRobbie, G. G.      | Shelburne  |
| Locheed, L. T.         | Toronto     | Manley, F. F.        | Toronto    |
| Logan, W. M.           | Hamilton    | Mark, Miss M. A.     | Peterboro  |
| Loveck, Miss G.        | Ottawa      | Martin, R. T.        | Toronto    |
| Luke, Miss Mary E.     | Oshawa      | Martin, S.           | St. Mary's |
| Macdonald, J.          | Picton      | Martin, W. E.        | Shelburne  |
| Macintyre, Miss Mary   | Toronto     | Marty, Miss A. E.    | St. Thomas |
| Mackay, D.             | Toronto     | Mason, J. J.         | Hamilton   |
| Mackenzie, Miss L' P.  | Brantford   | Matthews, J. J.      | Petrolea   |
| Macintosh, W.          | Madoc       | May, Geo. S.         | Ottawa     |
| MacMurchy, N.          | Elora       | Mayberry, C. A.      | Stratford  |
| Macpherson, C.         | Prescott    | Merchant, F. W.      | London     |
| McAllister, S.         | Toronto     | Michell, F. L.       | Perth      |
| McArthur, Miss A. C.   | London      | Millar, Miss         | Toronto    |
| McBride, D.            | Port Perry  | Miller, G. A.        | Dresden    |
| McCaughey, Miss M.     | Belleville  | Miller, W. G.        | Kingston   |
| McCool, J.             | London      | Milne, J. W.         | Odessa     |
| McCutcheon, Miss C. J. | Strathroy   | Milner, W. S.        | Toronto    |
| McCrimmon, D. A.       | York Mills  | Mills, David         | Bayview    |
| McDiarmid, H. F.       | Ingersoll   | Mills, Mrs. D.       | Bayview    |
| McDonald, Mrs. A. A.   | Toronto     | Mitchell, David      | Fergus     |
| McDonald, J. V.        | Kerwood     | Mitchell, G. W.      | Cobourg    |
| McDonald, Miss M.      | London      | Mitchell, Miss J. A. | Cobourg    |
| McDougall, A. H.       | Ottawa      | Moffatt, J. N.       | Bethany    |
| McGee, C. H.           | Brockville  | Montgomery, F. M.    | Barrie     |
| McGllivray, C. F.      | Whitby      | Moore, W. F.         | Dundas     |
| McGregor, D.           | Johnson     | Morden, G. W.        | Picton     |
| McGregor, D. C.        | Johnson     | Morgan, J. C.        | Barrie     |
| McGregor, M.           | Tilsonburg  | Morgan, J. J.        | Oniemeem   |
| McKee, A.              | Midland     | Moses, Clarke        | Caledonia  |
| McKee, G. A.           | Ridgetown   | Mowatt, A. A.        | Meaford    |
| McKellar, H. S.        | Chatham     | Munro, John          | Ottawa     |
| McKenzie, Miss M. A.   | Bowmanville | Munro, Mrs. M. K.    | Athens     |
| McKenzie, M. A.        | Toronto     | Murray, R. W.        | Toronto    |
| McKenzie, W. F.        | Marden      | Murray, T.           | Owen Sound |
| McKenzie, W. G.        | Fairview    | Murton, L. K.        | Oshawa     |
| McKinley, Charles      | Georgetown  | Musgrave, A. H.      | Wingham    |
| McKirdy, Miss M.       | London      | Myer, A. M.          | Dunnville  |
| McKnight, R.           | Owen Sound  | Nethercott, S.       | Woodstock  |
| McLean, Miss Mary      | Galt        | Nichol, C. O.        | Waterdown  |
| McLellan, J. A.        | Toronto     | Nicol, Miss M. A.    | Napanee    |
| McMillan, Alexander    | Toronto     | Noble, J.            | Toronto    |
| McMurchie, J.          | Harriston   | Norris, James        | Kincardine |
| McMurchy, A.           | Toronto     | Oakes, George        | Highgate   |
| McNicol, J.            | Hagarsville | Odell, A.            | Cobourg    |
| McPherson, R. U.       | Toronto     |                      |            |
| McQueen, Robert        | Kirkwall    |                      |            |

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|-----------------------|----------------|---------------------|-------------|
| O'Dell, J. W.         | Cobourg        | Scott, William      | Guelph      |
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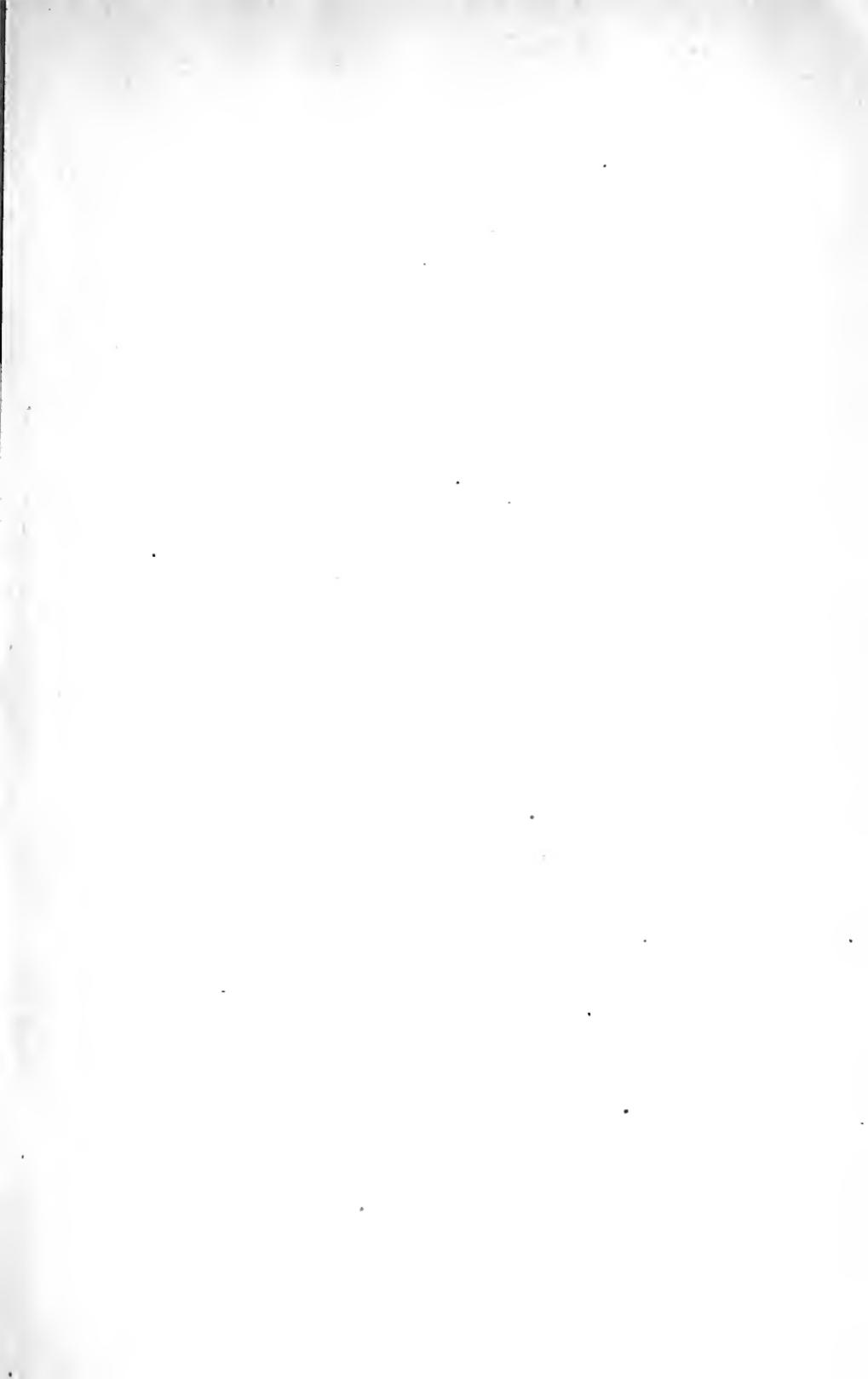
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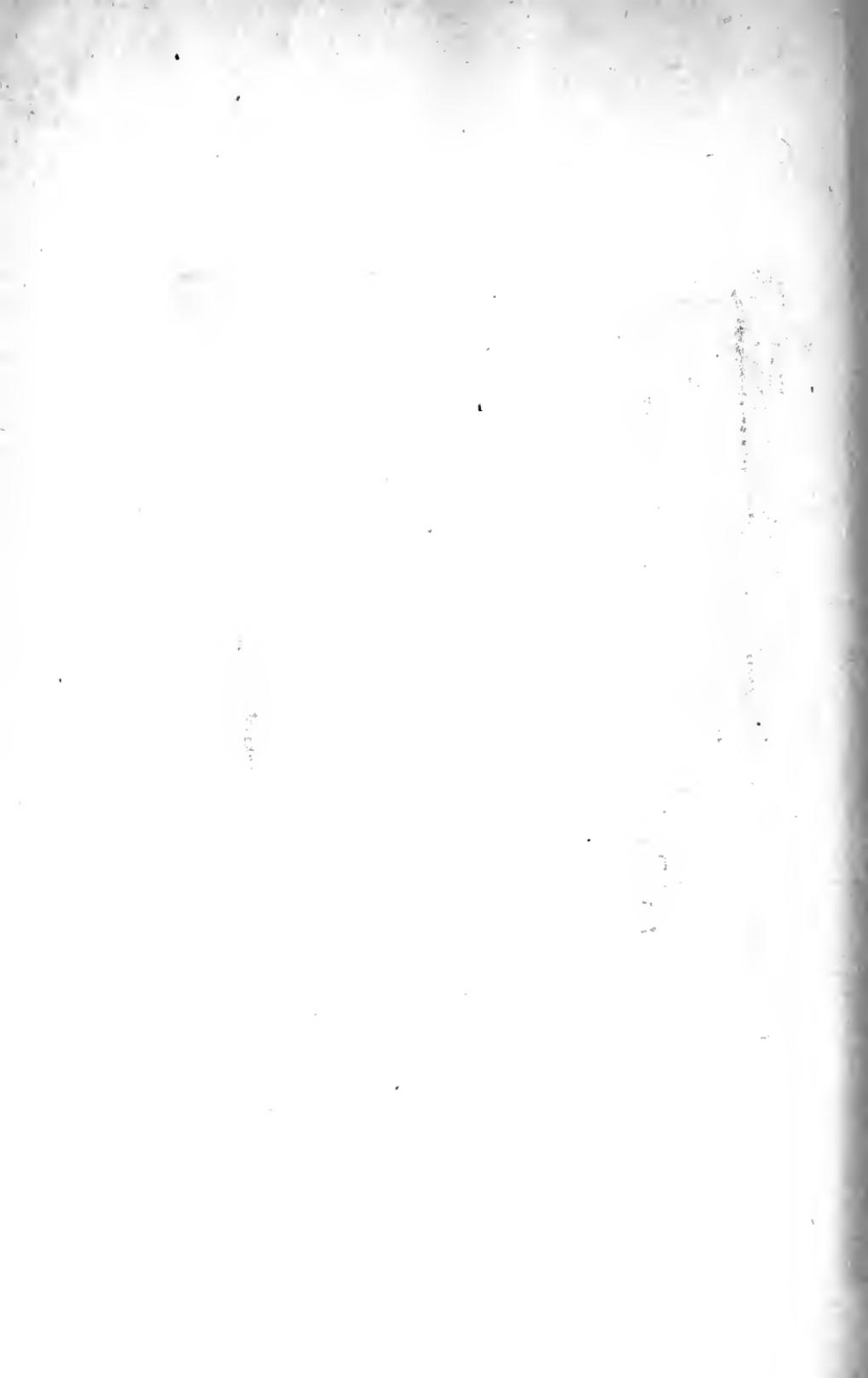
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